ASFALIS TransServer

Manual for Administrator

August 2020

Elysium Co. Ltd.

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Important Notice: When Using This Product

Administrators of this product should manage the registered users' information and their access privileges with reasonable precaution. If these information are not managed properly, there are risks of unauthorized access and information leakage. Regarding the environment where the product is installed (PC, network, etc.), we strongly recommend that you apply patches and set up firewalls to reduce the risk on security.

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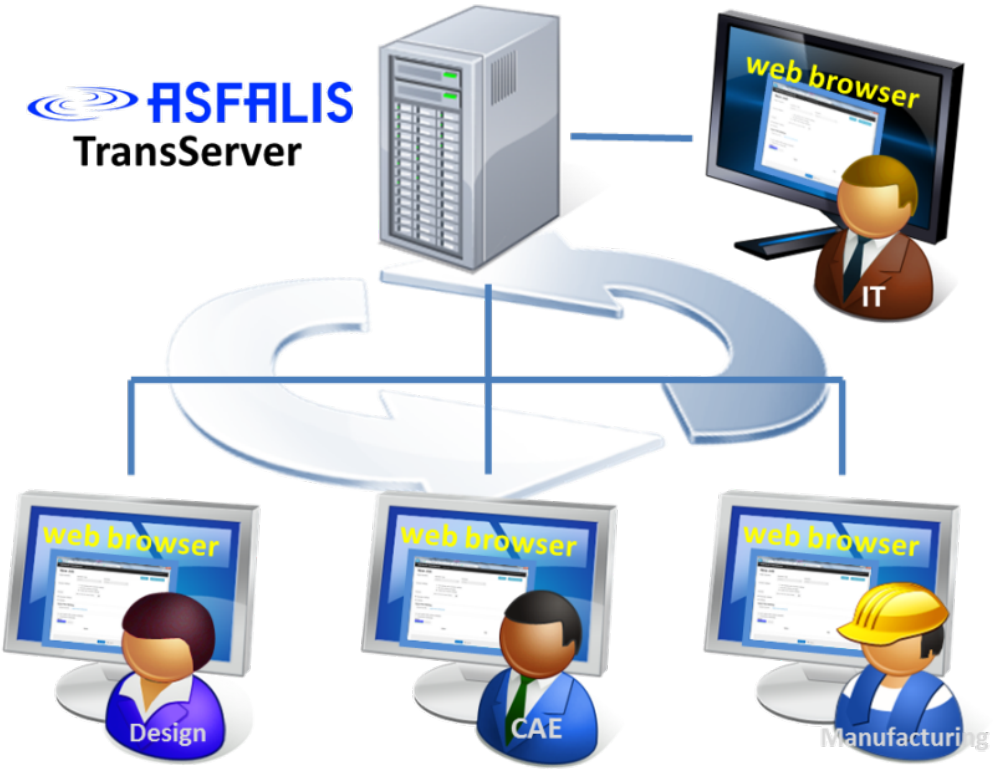
1. Introduction

1.1. What is ASFALIS TransServer (ATS)



ASFALIS TransServer enables you to administrate the translation Jobs according to your purpose. This system requires 2 types of Users, one is Administrators and the other is Users. Administrators and Users have own roles to use ASFALIS TransServer, please refer to the manuals for detailed information each role.
ASFALIS TransServer requires Slave Node of ASFALIS Desktop Controller (ADC). So you have to setup the environment for Slave Node of ADC first, and then ASFALIS TransServer will work with it.
Please refer to "Installation Guide" for the detail.
In this document, each topic that you should know is classified as below.

Notes)
The items you should know and specify.

Hint)
You should know it.

What's that)
This info will help you to organize ASFALIS TransServer.

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1.2. Server and Client System Requirements

Recommended System Requirements

- Server(ASFALIS TransServer)

	Concurrent connection (*1)	
	Up to 3	4 - 10
CPU	Equivalent or better than either of followings;	
	• E5-24xx v2, E5-26xx v2 Series 2.2GHz 4 cores • E5-26xx v3, E5-26xx v4 Series 2GHz 4 cores • Xeon Silver 41xx Series, Xeon Gold 51xx Series 2GHz 4 cores	• E5-24xx v2, E5-26xx v2 Series 2.2GHz 8 cores • E5-26xx v3, E5-26xx v4 Series 2GHz 8 cores • Xeon Silver 41xx Series, Xeon Gold 51xx Series 2GHz 8 cores
Memory	8GB or more	16GB or more
Network connection	1Gbps or higher	
Number of Application Server instance	10	30
OS	Microsoft Windows Server 2012 RTM Microsoft Windows Server 2012 R2 RTM Microsoft Windows Server 2016	

(*1) : Definition of "Concurrent Connection"

This is the total number of sessions that can access to ASFALIS TransServer concurrently (= within 3 seconds), continuously, and repeatedly, while maintaining the response performance, in other words, the total number of "active" users at the same.
The total number of active users will change depending on the time of the day, the day of the week, and/or the workload at the time etc. Therefore, please prepare the environment that would accommodate the maximum expected number of concurrent connections.

- Client

CPU	Core2 Duo E6600 equivalent or better

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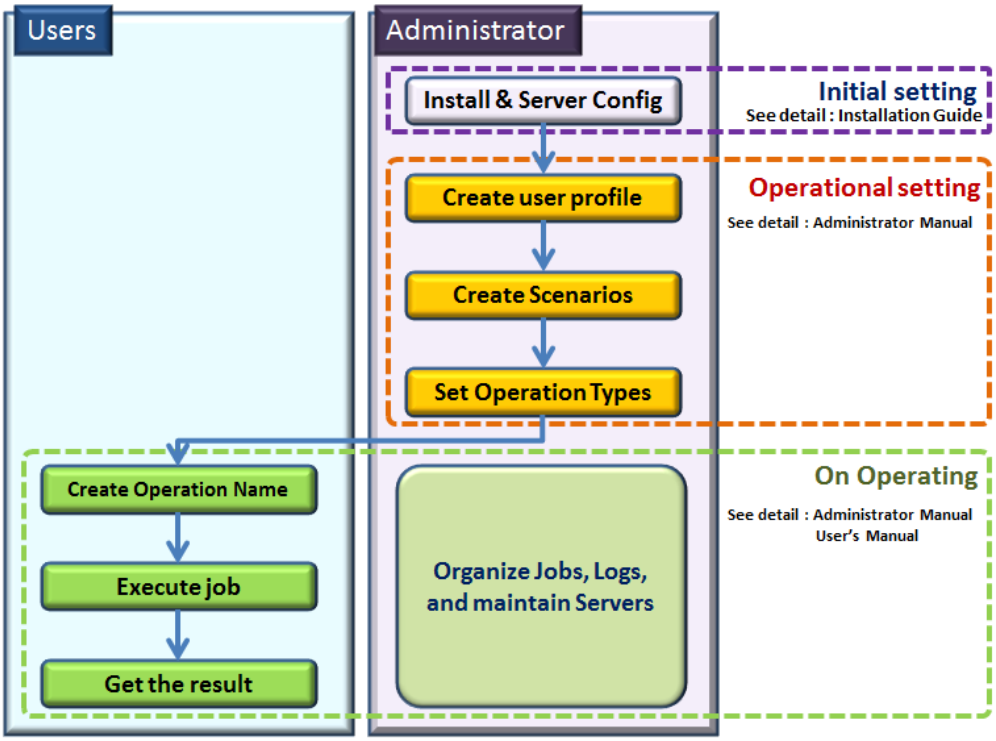
Memory	1GB or more
Network connection	100Mbps or faster
Browser	Internet Explorer 11 Microsoft Edge Google Chrome

Document Mode

Please note that ASFALIS TransServer may not operate correctly even in the environment with Internet Explorer 11 if the document mode is changed to Internet Explorer 8 automatically. Please check the settings in case the Enterprise Mode is enabled, document mode is managed at Group Policy Preference, etc.

Regarding the System requirements for ASFALIS Slave Node, please refer to ASFALIS Slave Node Installation Guide.

1.3. Works for Administrator and Users



- What Administrator's role is
  - Configuring the server environments
  - Management of Users/Groups/Permission
  - Management of Scenarios
  - Management of "Operations Types" and "Operation"
  - Management of Jobs and logs Executing Jobs

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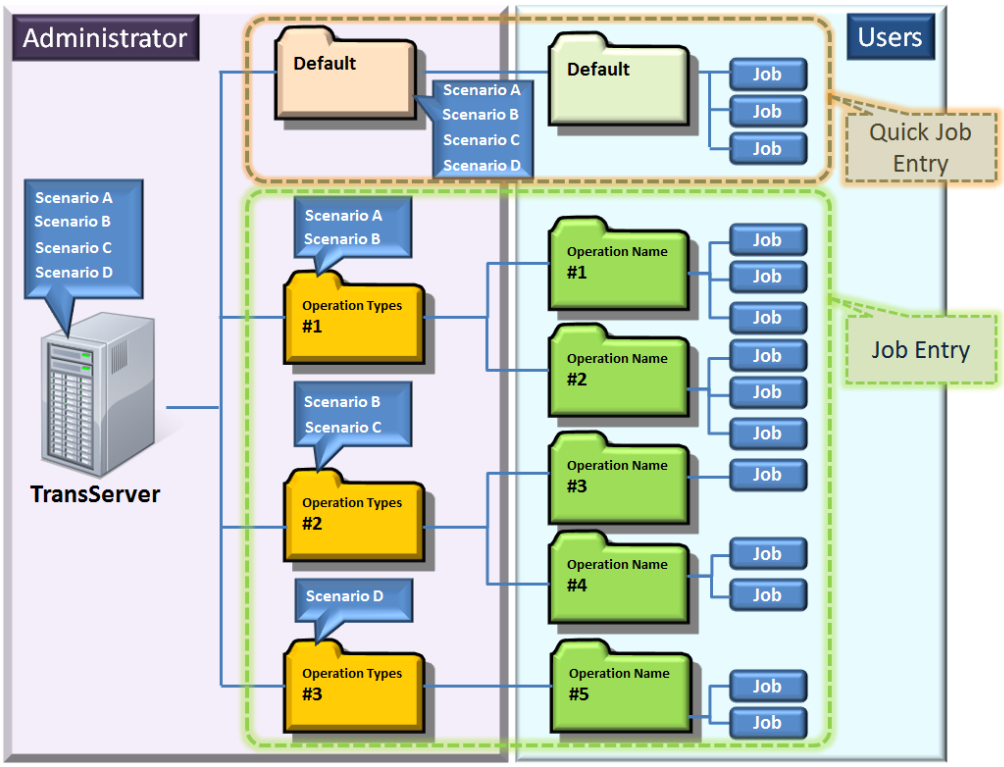
- What User's role is
  - Creating "Operation"
  - Arranging parameters for Scenario if available
  - Executing Jobs

> What's that)
> Administrator needs to know the differences between "Operation Types" and "Operation". (Please refer to [1.4, "Manage your Jobs by "Operation types" and "Operation""])

1.4. Manage your Jobs by "Operation types" and "Operation"



- Job

  "Job" is a unit of each translation. Each Job contains the original 3D data, the logs and the results of each process. If a Job failed, you can check logs and get an intermediate result.

- Operation Types

  "Operation Types" is a kind of Job folder that only the administrator can create. It will be set for each User group or division as a primary folder.

- Operation

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Users can select own "Operation Type" and create "Operation Name" to store own Jobs. This structure will help to organize Jobs and reuse Job setting to other translations.

- Job Entry

  Users can select 2 types of Job entry. One is "Quick Job Entry" as temporary Job execution. And the other is "Job Entry" as operational Job execution.

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2. Quick Start

You can boot ASFALIS TransServer with minimum setting to translate 3D data as follows.
If you need to organize ASFALIS TransServer for companywide usage, you should setup detail items in [3, *Operational Settings for Companywide*].

2.1. Log in to ASFALIS TransServer as an Administrator

The Login name and password of the administrator created during installation is below.

Login Name	admin
Password	admin

2.2. To Register Users

2.2.1. Create a New User Profile

Administrator can create a User (profile) who can login and execute translation Jobs.

1. Select [Administration] > [User Administration]
2. Click [New] to create User profile.

3. Fill in necessary items and register a new profile as below.

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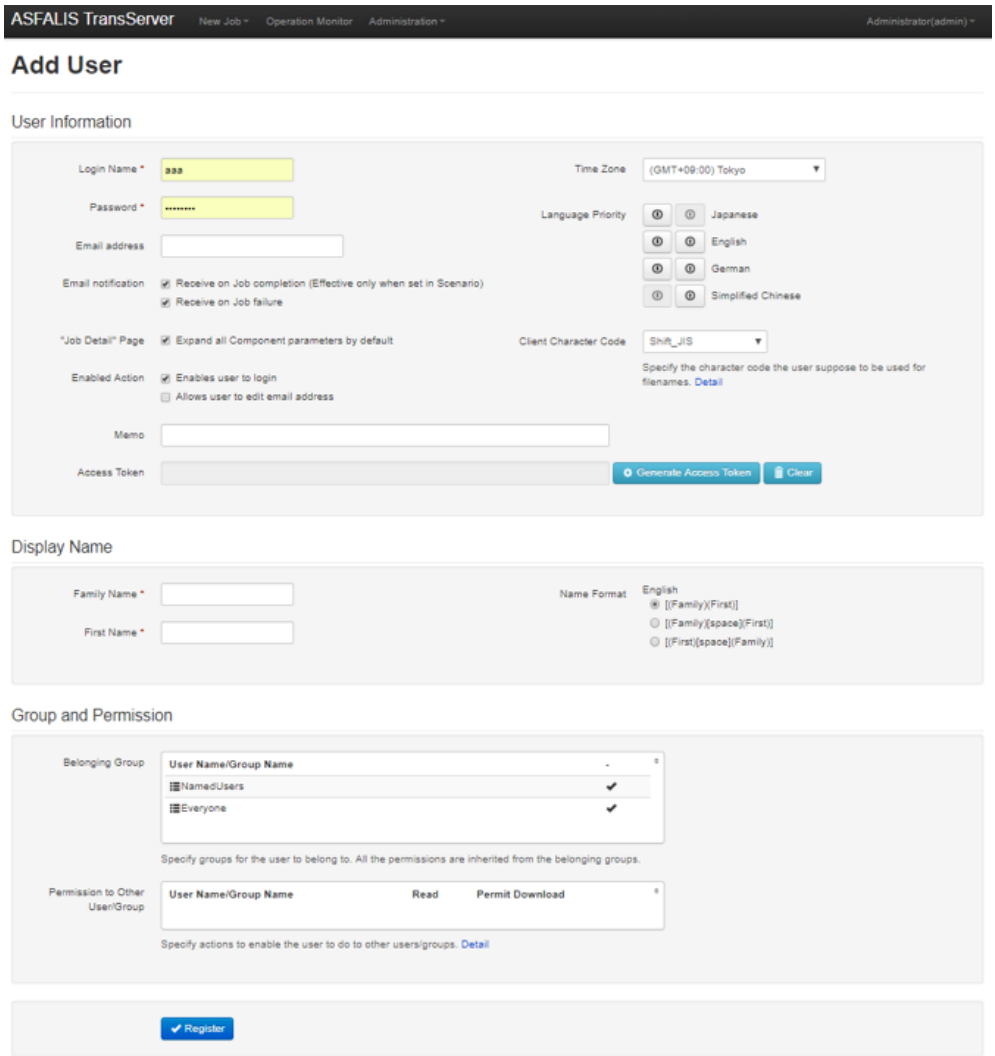

Item	Description
Login Name	Specify the login name for ASFALIS TransServer. Please ensure to set a unique name for each account. Valid characters are uppercase alphabet, lowercase alphabet, numbers, underscores "_" and hyphen "-". You cannot set a hyphen at the beginning of the user name. This is unamendable once created.
Password	Specify the login password with minimum 4 letters. There is no restriction on character type.
Email address	Specify the email address of the user. This will be used as recipient address for subscribed email notifications.

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Email notification	Receive on Job completion (Effective only when set in Scenario)	Check this option to receive email notification on Job completion. This is effective only when [Mail] Component is included in the Scenario.
	Receive on Job failure	Check this option to receive email notification on Job failure on the Jobs submitted by respective Users.
Enabled Action	Enables user to login	Check this option to activate the User. Login will be disabled for deactivated User.
	Allows user to edit email address	Check this option to allow Users to change their email address.
Time Zone		Set the local time zone. Time will be displayed in the local time zone of login User.
Language Priority		Set the display language priority order in ascending order.
Client Character Code		Set the character encoding for the filename of uploaded/downloaded files. This will be used only when the filename contains non-ASCII characters.
Access Token		Specify the access token for using Web API. Please refer to "Web API Manual for ATS Customization (For Developers)" for the details.
Family Name / First Name		Specify the family name and the first name of the User. Character limit is 255 characters. There is no restriction on character type.
Belonging Group		Specify the Group to belong to. Users inherit permissions given to the belonging Groups.
Permission to other User/Group		Specify the permission level on other Groups/Users; - Read: Allow to view named User/Group - Permit Download: Give permissions equivalent to named User/Group

User profile is editable except for login name anytime from [Administration] > [User Administration] > [Edit User] page as follows;

Item	Admin	User
Login Name	×	×
Password	○	○

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Item	Admin	User
Family name	○	×
First name	○	×

2.3. Scenario

2.3.1. Scenarios/Components

"Scenario" is

The processing flow defined by the combination of Components.

"Component" is

A single process executed in ASFALIS TransServer.
This is the smallest unit of the process executed in ASFALIS TransServer, and a combination of Components makes a Scenario.
The Components are classified into two groups;

- ASFALIS Components: This includes the Components for the translation such as "CAD Import," "CAD Export," "Geometry Healing" and so on, and the Components for the data optimization such as "Simplification", "Check Geometry" and so on.
- Components to control ASFALIS TransServer: This includes the Components to control the behavior of ASFALIS TransServer such as "PDQ Error Control," "Mail" and so on.

Component	Description
CAD Import	This is the Component to translate files in CAD file formats or in general format (such as IGES) to ENF (Elysium Neutral File). Select [CAD Import] from the pull-down menu, and then select a Component from the second pull-down menu which will appear on the right side once [CAD Import] has been selected. e.g.,) [CAD Import] > [CATIA V5 Import] [CAD Import] > [IGES Import]
CAD Export	This is the Component to translate files in ENF (Elysium Neutral File) to CAD file formats or in general format (such as IGES). Select [CAD Export] from the pull-down menu, and then select a Component from the second pull-down menu which will appear on the right side once [CAD Export] has been selected. e.g.,) [CAD Export] > [NX Export] [CAD Export] > [Parasolid Export]

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Component	Description
Geometry Healing	This is the Component to heal (correct) the data in ENF (Elysium Neutral File) to the appropriate data for the target CAD system. Both the input and the output files are ENF. (The output file will be healed ENF.) Basic CAD to CAD translations should be executed in the order of [CAD Import] > [Geometry Healing] > [CAD Export].
Simplification	This is the Component to simplify the data in ENF (Elysium Neutral File) by removing fillets or round holes. Both the input and the output files are ENF. (The output file will be simplified ENF.) Select [Simplification] and the Sub-Components such as [Remove Fillet], [Remove Round Hole] etc. You can specify multiple Sub-Components for a single Component process.
Polygon	This is the Component to generate polygons (the elements of ENF file will be faceted) from the data in ENF (Elysium Neutral File). Both the input and the output files are ENF. (The output file will be ENF including polygons.)
Polygon Optimizer	This is the Component to optimize polygons in ENF (Elysium Neutral File). Both the input and the output files are ENF. (The output file will be ENF with polygons optimized.) Select [Polygon Optimizer] and the Sub-Components such as [Remesh], [Smoothing Polygon] etc. You can specify multiple Sub-Components for a single Component process.
Attribute Editor	This is the Component to edit (modify, delete and add) attributes in ENF (Elysium Neutral File). Both the input and the output files are ENF. (The output file will be ENF with attribute information edited.)
Assembly Editor	This is the Component to edit (change the assembly structure or delete parts or assemblies) assemblies in ENF (Elysium Neutral File). Both the input and the output files are ENF. (The output file will be ENF with assembly information edited.)
Check Geometry	This is the Component to check PDQ (Product Data Quality) in ENF (Elysium Neutral File). Both the input and the output files are ENF. (The output file will be ENF including the result from PDQ check.)
Check Interference	This is the Component to check whether parts in an assembly are interfering or touching each other. Both the input and the output files are ENF. (The output will be ENF without the result from interference check, exactly the same ENF as input file. The result from interference check will be exported as a log file in CSV format.
CAD Validator	This is the Component to compare two ENF (Elysium Neutral File) files for validation/verification purposes. There are two options for the file format of the output file; - *.dvfx file: this is the special format for the high-speed viewing in Model Viewer. - *.enf_dif file: this can be read both in Model Viewer and CADdoctor.

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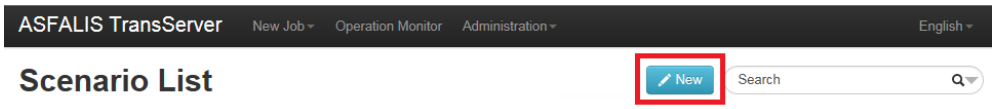
Component	Description
PDQ Error Control	This is the Component to control the behavior after [Check Geometry]. The Job will be stopped when the number of the errors from the PDQ check exceeds the specified. The input file is ENF including the result from PDQ check. [PDQ Error Control] will be performed only on the PDQ items checked in the earlier PDQ check. This Component always comes in a combination with [Check Geometry] and needs to be placed straight after that.
Transfer to Windows File Server	This is the Component to transfer a copy of the output files to the specified directory of windows file server. To use this Component, you need to specify the Windows file server from [Administration] > [External File Server Administration] in advance.
Transfer to FTP Server	This is the Component to transfer a copy of the output files to the specified directory of FTP (File Transfer Protocol) server. To use this Component, you need to specify the FTP server from [Administration] > [External File Server Administration] in advance.
ENF Editor	This is the Component to edit or obtain the information in ENF (Elysium Neutral File) files. Both the input and the output files are ENF.
Mail	This is the Component to send notification messages when the Job has been finished.
Rename Output File	This is the Component to change the filename. Please note that only the top assembly file will be renamed when the Component input is consisted of multiple files.
Join	This is the Component to wait for two Components that are executed prior to this Component to complete before executing the following Component.
Run Child Job(s) with another Scenario	This is the Component to run another Scenario within a Scenario.
Stop Job	This is the Component to stop the Job as abend when the specified condition(s) are satisfied.

2.3.2. How to Create a New Scenario

1. Select [Administration] > [Scenario Administration]
2. Click [New] to create a Scenario



3. Fill in "Scenario Name", add Components, set parameters and registrar.

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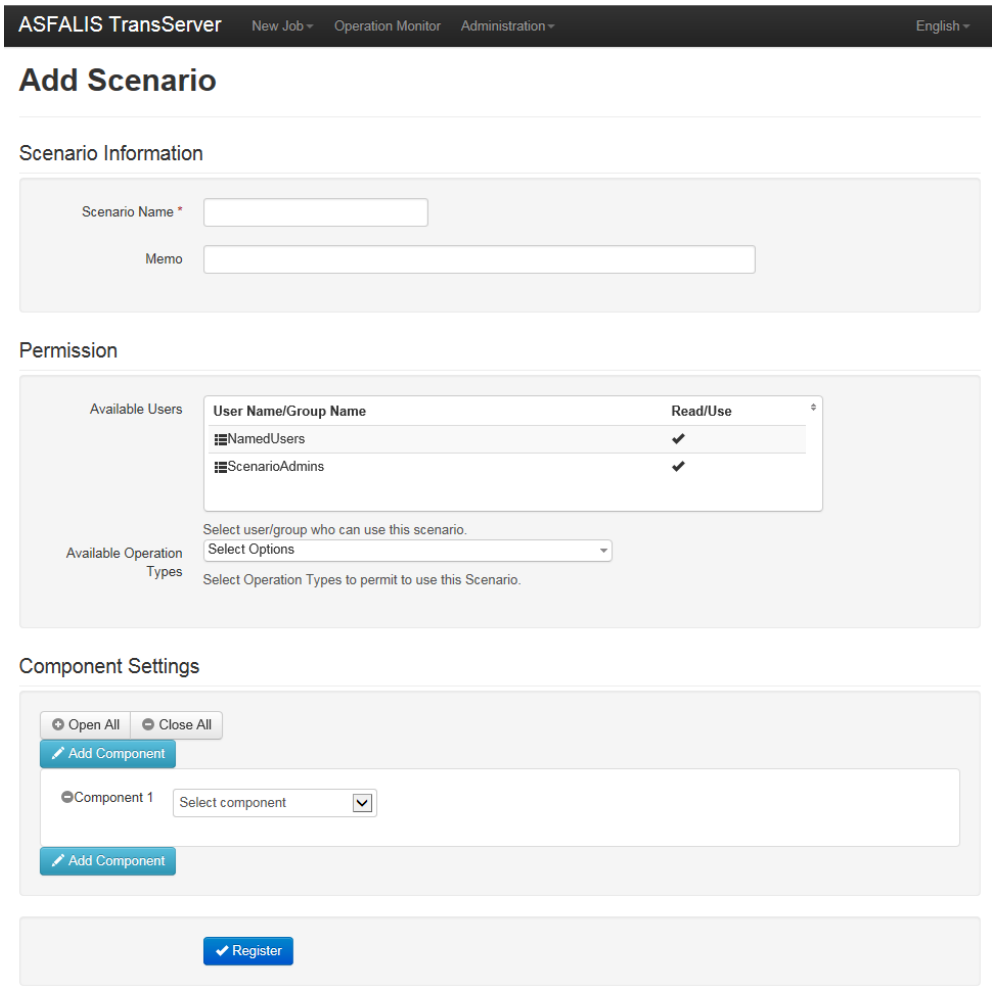
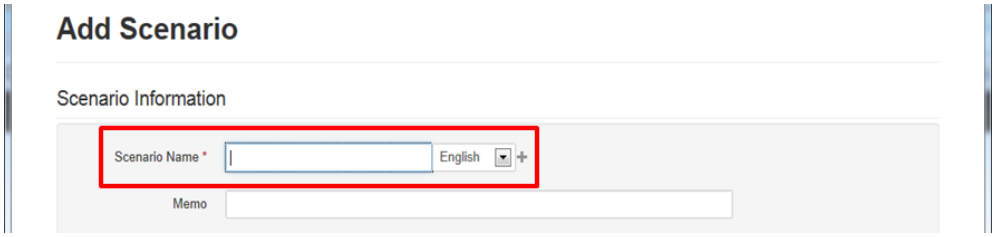


Note)
Only Users in Administrators group or in ScenarioAdmins are able to create Scenarios for data translation.

2.3.3. Sample Scenario

A. Translate IGES data to Parasolid

1. Fill in Scenario Name.



2. CAD Import: Select "CAD Import" > "IGES Import" at Component 1, and set parameter of "Stitch".

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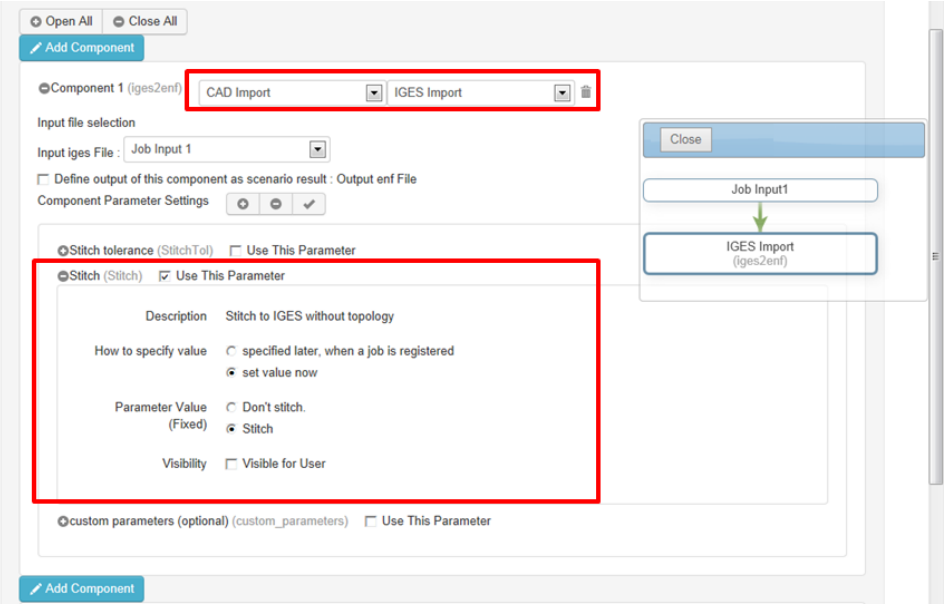
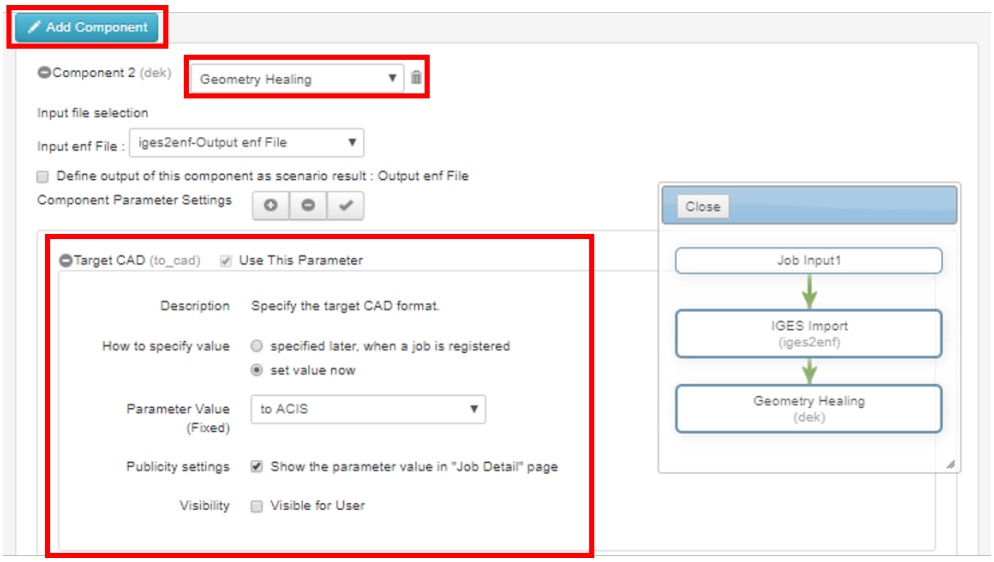


Hint)
Use "specified later, when a Job is registered", if User should change parameters for each Job.

3. Geometry Healing: Click [Add Component] and select "Geometry Healing".
   Set the parameters of "Target CAD" at Component 2.



4. CAD Export: Click [Add Component] and select "CAD Export" > "Parasolid Export" at Component 3. And then click [Register].

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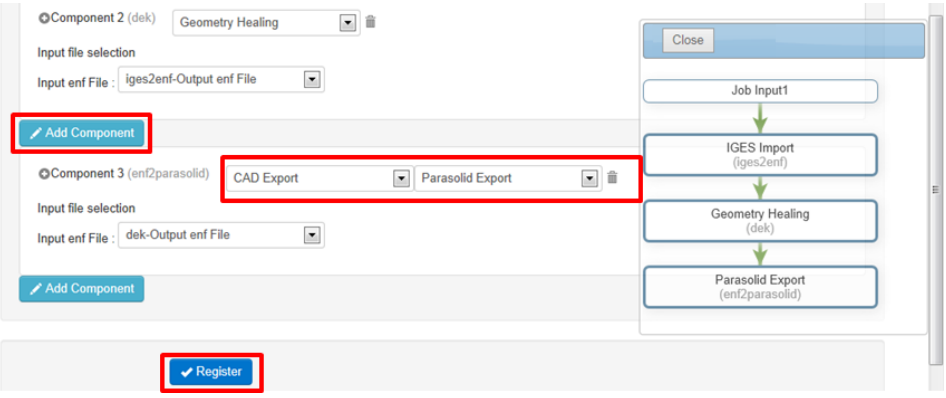
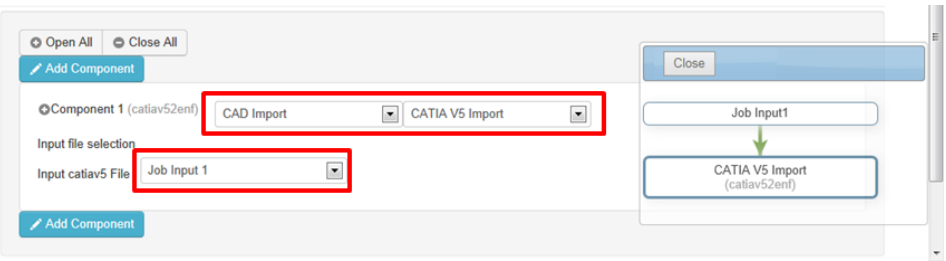
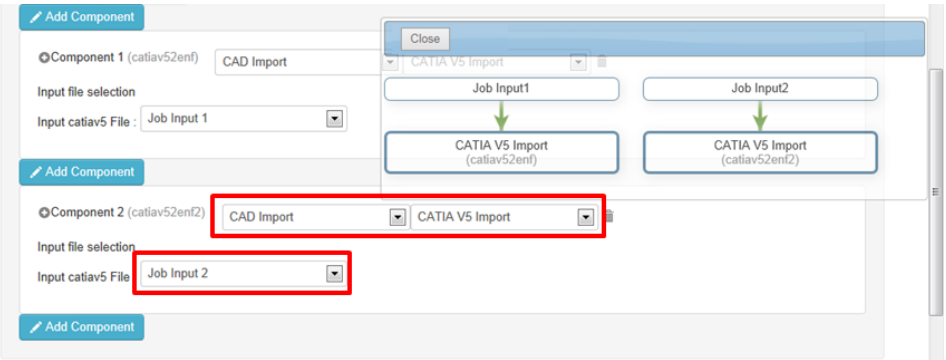


B. Converting two CATIA V5 files and then validating them

1. Fill in Scenario Name.
2. Select [CAD Import] > [CATIA V5 Import] at Component 1. Confirm that the pull-down menu at the input file selection shows "Job Input 1."



3. Click [Add Component] and select [CAD Import] > [CATIA V5 Import] at Component 2. Confirm that the pull-down menu at the input file selection shows "Job Input 2."



4. Click [Add Component] and select [Validation] at Component 3. Confirm that the pull-down menu at the input file selection shows "catiav52enf-Output enf File" as the Source file and "catiav52enf2-Output enf File" as the Target file

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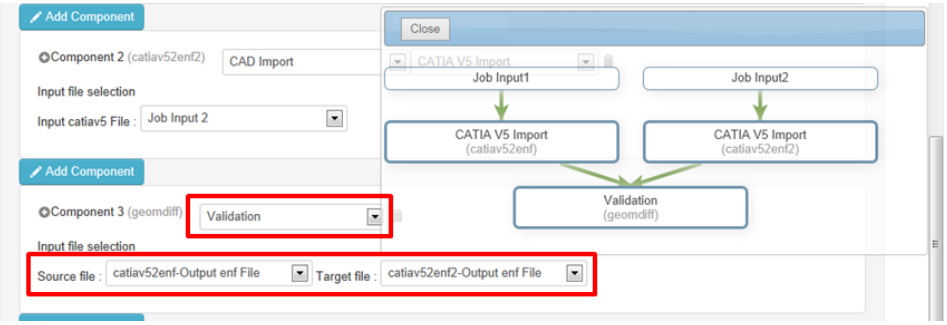

5. Click [Register] and then the created Scenario will be registered.

> Hint)
> It is impossible to add or delete the Component once that Scenario has been used. You should confirm which Components are required to complete this translation and gain what you need.

Component

You need to select Components to build 3D data translation Scenario such as the Sample Scenario. (2.3.3, “Sample Scenario”)
Check in the checkbox of "Define output of this Component as Scenario result" to define the output files from the Components as the output file of the Scenario. This will allow everyone, including the Users who are not authorized to edit or delete, can download the files defined as the output file of the Scenario.
Even when this is not checked, the Users who are authorized to edit or delete can download the output files from [Operation Detail] page.

Please refer to "4, *Operational Settings for Companywide with Permission*" of this document for the details about the User management.

Parameters

Each Component has own parameters to control its behavior. You need to select and check at "Use This Parameter" to setup Component to suit your Scenario. You need to check the box for "specified later" when you register Scenarios to make it possible to change the value of parameters when Users enter Jobs.

Scenario flow chart

This shows the flow chart of the whole Scenario. It will be displayed on the right side in the middle. It is useful in creating a new Scenario or editing existing Scenarios, especially on the Scenarios with multiple Job inputs, for example, [Validation], or the Scenarios with many Components on which you need to pay more attention in specifying the input files. Click [Open/Close] button to show or hide the flow chart.

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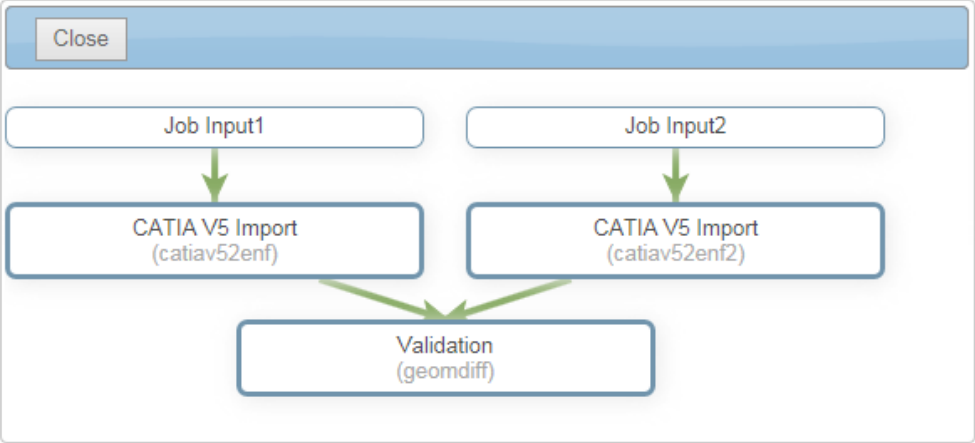
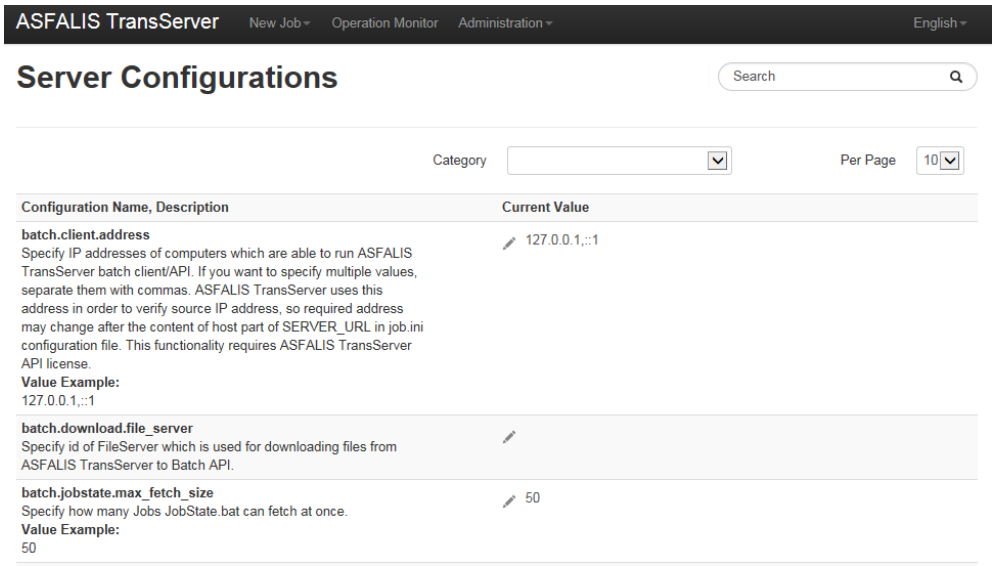


2.4. Server Configurations

You can setup server configurations. And 2 items must be set up for initial.

1. Select [Administration] > [Server Configurations].
2. Set the value for each item if required.



Please refer to the description which appears with each setting for more details.

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Note)
Configure required 2 items as below

Configuration Name	Description
system.default.timezone	Default Time Zone
web.common.server_base_address	Specify base URL of ASFALIS TransServer for Users. The URL specified with this is referred as "ATS Base URL" in this document.

2.4.1. Export Server Configuration

This is a function to export the ASFALIS TransServer server configuration in JSON format. This is useful to validate the changes made since a certain time, e.g., to detect an error cause in case of troubleshooting.

1. Select [Administration] > [Server Configurations] from the menu bar.
2. Click [Export].

You can also export from the command line as follows in case you cannot start ASFALIS TransServer and so forth.

1. Run the following in the command line; <ASFALIS TransServer installation folder>\k2dashboard\start-console.bat
2. Run the following rake command in the command line, and specify the output file by its absolute file path. The line break is not required.

```
bundle exec rake ats:server_configurations:export
ATS_SERVER_CONFIGURATIONS_EXPORT_FILE=<output file path>
```

2.5. Maintenance Mode

You can disable the login except for Users with the administrative rights while maintaining ASFALIS TransServer. Users who belong to either of the following groups have the administrative rights.

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- Administrators
- UserAdmins
- JobAdmins
- ScenarioAdmins

Set "true" for "system.under_maintenance" from [Server Configurations] to enter "Maintenance Mode" and disable the login to ASFALIS TransServer except Users with administrative rights. Once this is set, Users without administrative rights will be automatically logged out. A notice will be displayed at the top of ASFALIS TransServer page when in Maintenance Mode.
Set "false" for "system.under_maintenance" to exit Maintenance Mode.

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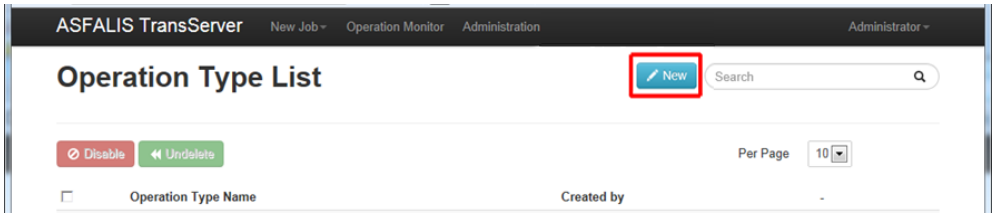
3. Operational Settings for Companywide

What "Operation Type" is for

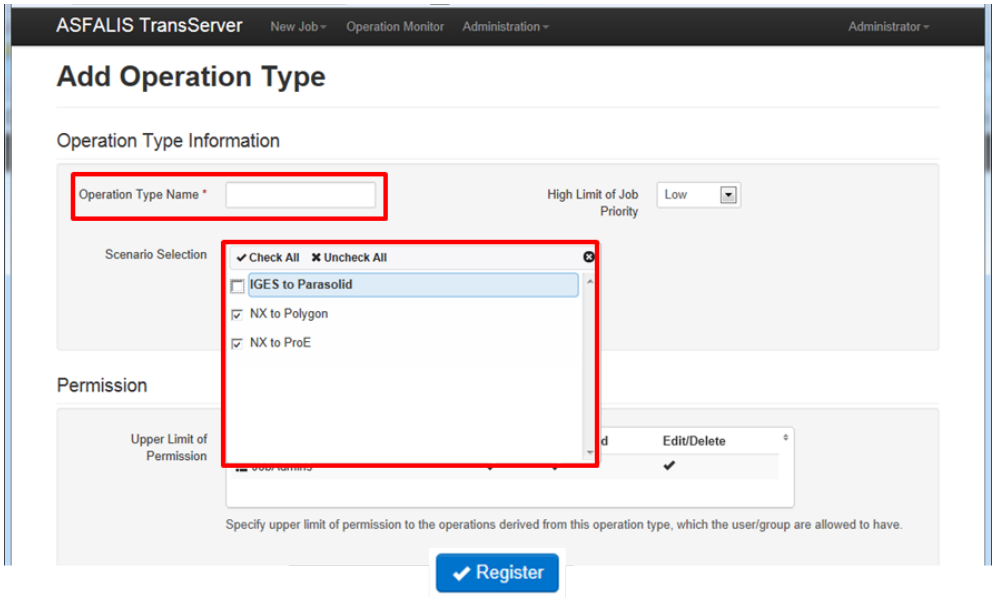
You need folders to store the result and Jobs itself. "Operation Type" is a primary folder for Users (especially for User group, division, etc.) and the permission to create "Operation Type" is given to Administrator only. (Please see detail [1.3, “Works for Administrator and Users”])

3.1. Operation Type

1. Select [Administration] > [Operation Type Administration].
2. Click [New] to create "Operation Type".



3. Type in "Operation Type Name" and select Scenarios for Users. And then click "Register".



You can set "Operation Attribute" for "Operation Type" and it will be helpful to manage "Operation".

You can set "High Limit of Job Priority" for "Operation Type". When you set an upper limit to the priority, job created by using this Operation Type cannot exceed the upper limit you set.

This attribute is optional and for Administrator only.

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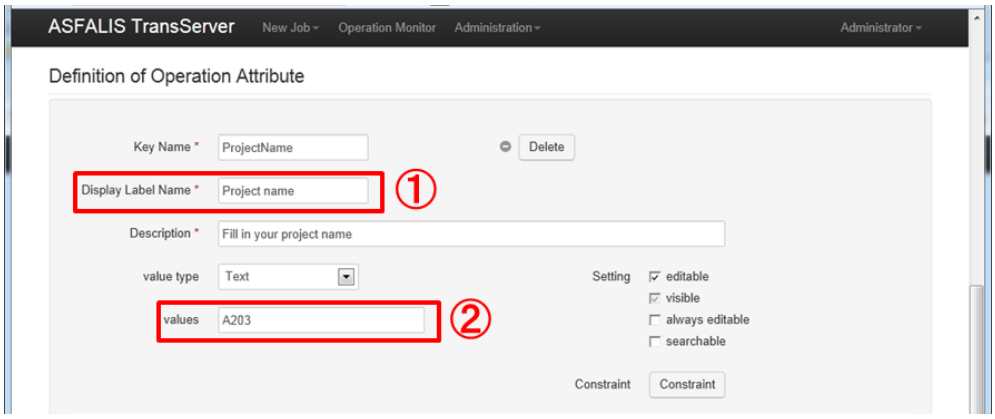
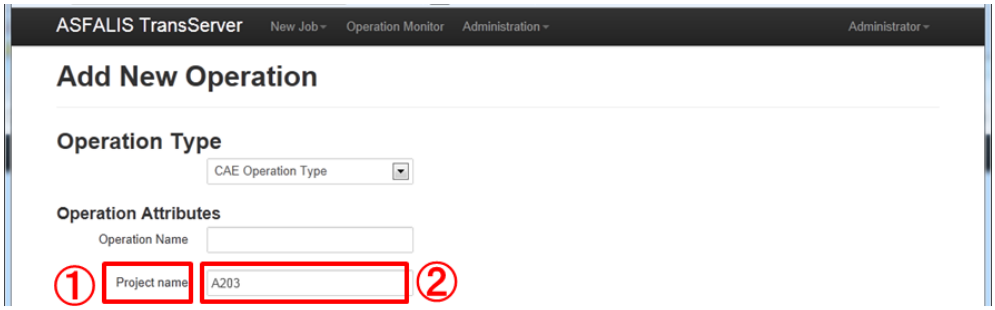
1. Fill in "key name", "label name" and "description".
2. Select "value type", "setting" and fill in value as sample. And register it.



3. When Users create a new "operation name", they can add attribute as below.

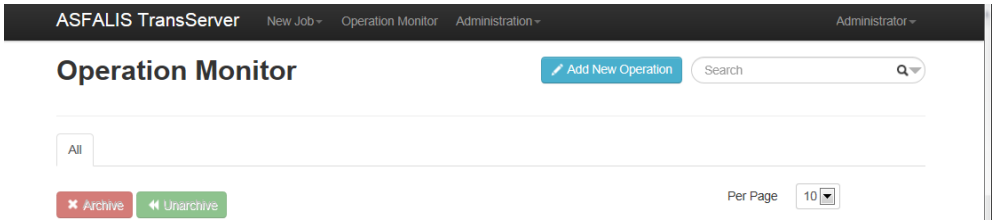


3.2. Operation

What "Operation" is for

"Operation" is a secondary folder for Users (especially for each project, work, etc.) and the permission to create "Operation" is given to both Administrator and Users.
You should make sure the differences between "Operation Type" and "Operation". (See [1.4, “Manage your Jobs by "Operation types" and "Operation"”] for the details.)

1. Click [Add New Operation] on Operation Monitor.



2. Select "Operation Type" and fill in operation name, and then "Register".

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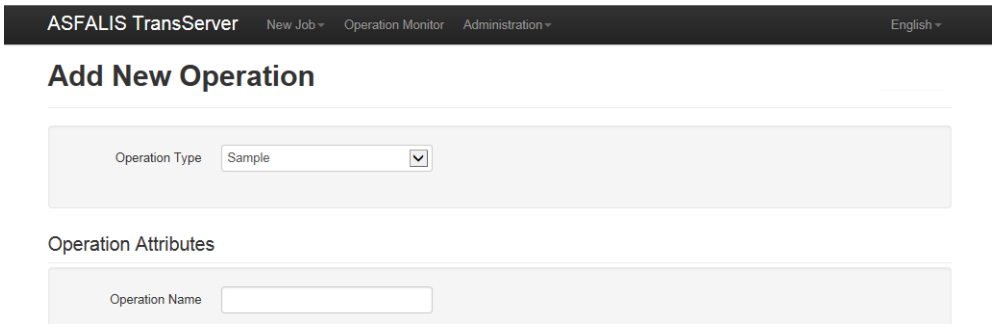

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4. Operational Settings for Companywide with Permission

4.1. Default Group

Group Name	Description
UserAdmins	You can do the following operations in Administration menu. * User Administration * Group Administration
JobAdmins	You can do the following operations in Administration menu. * Job Administration
ScenarioAdmins	You can do the following operations in Administration menu. * Scenario Administration * Operation Type Administration
Administrators	You can do all operations.
Everyone	The group that all Users belong to.
NamedUsers	The group that all Users except anonymous Users belong to.

4.2. Setting Permission

In ASFALIS TransServer, you can control the setting of permission on "Operation Type", "Operation", "Scenario", and "User/Group".

4.2.1. Operation Type Permission

When you create/edit an Operation Type, you can specify the upper limit of permissions to the Operations in that Operation Type per User or per Group.

This configuration is useful when some specific User Operators are assigned to some specific Operation Types. In this case, Operation Type permission represents actual relation between them.

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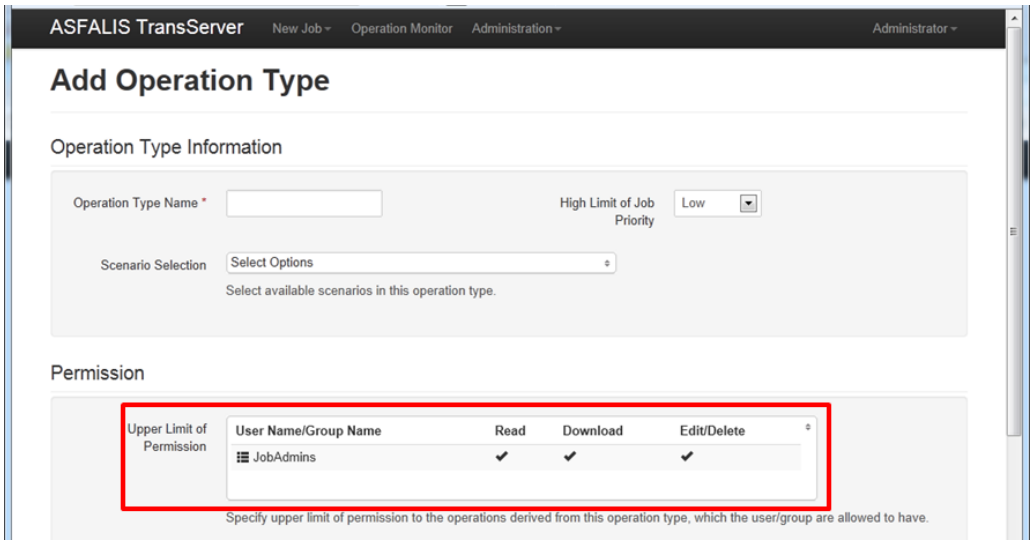
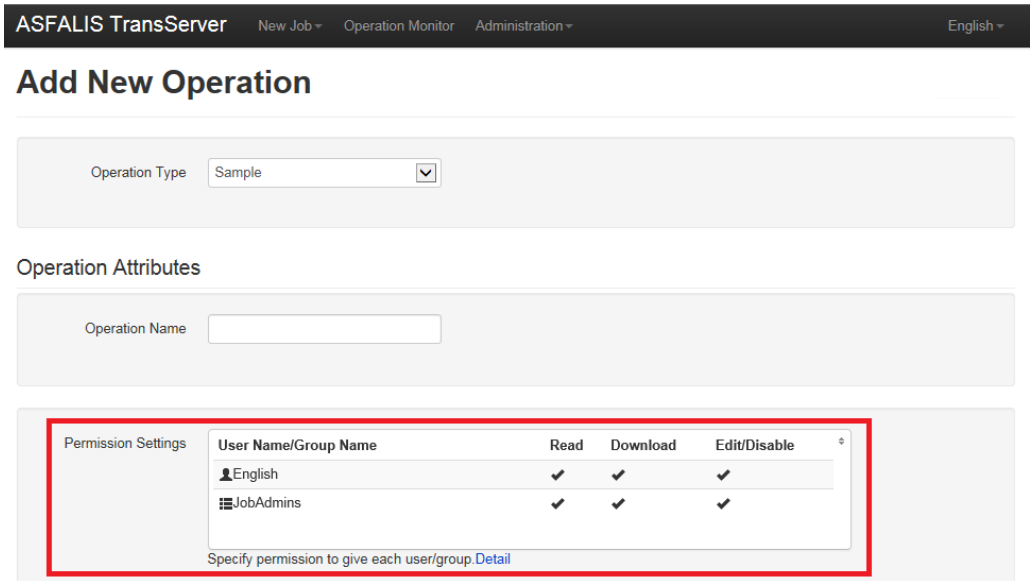


4.2.2. Operation Permission

This permission is managed not only by Administrators, but by all the Users who have a permission to create new Operations.
There are three levels of permissions in Operation.

- "Read" is permission to view the details of an operation and Jobs in that Operation.
- "Download" is permission to download the output files from the Jobs in that Operation.
- "Edit/Delete" is permission to enter Jobs, to download intermediate files and log files of the Jobs, to update Operation information, and to delete Jobs in that Operation.

When you create/edit an Operation, you can specify the access level of each Users/Groups who have "Permit Download" permission.



4.2.3. Scenario Permission

When you create/edit a Scenario, you can specify Users/Groups who can use that Scenario.

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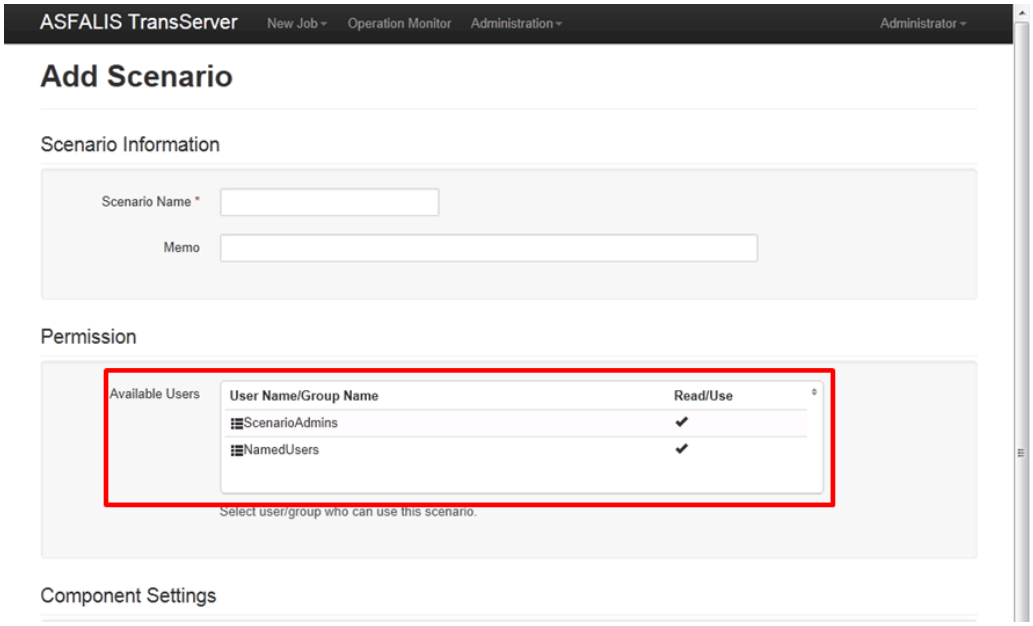
This configuration is useful when you would like to limit the availability of a specific Scenario or a Component.
By default, NamedUsers (a group that includes all Users except anonymous) can use all the Scenarios. If you would like to change it, refer to the Server Configurations of "web.scenario.creation.default_permission_read_use_for_named_users.enabled".



4.2.4. User/Group Permission

When you create/edit a User/Group, you can specify permission for that User/Group on what they are allowed to do to other Users/Groups.

- "Read" is permission to view other Users/Groups.
- "Permit Download" is permission to delegate your rights to specific Users/Groups.

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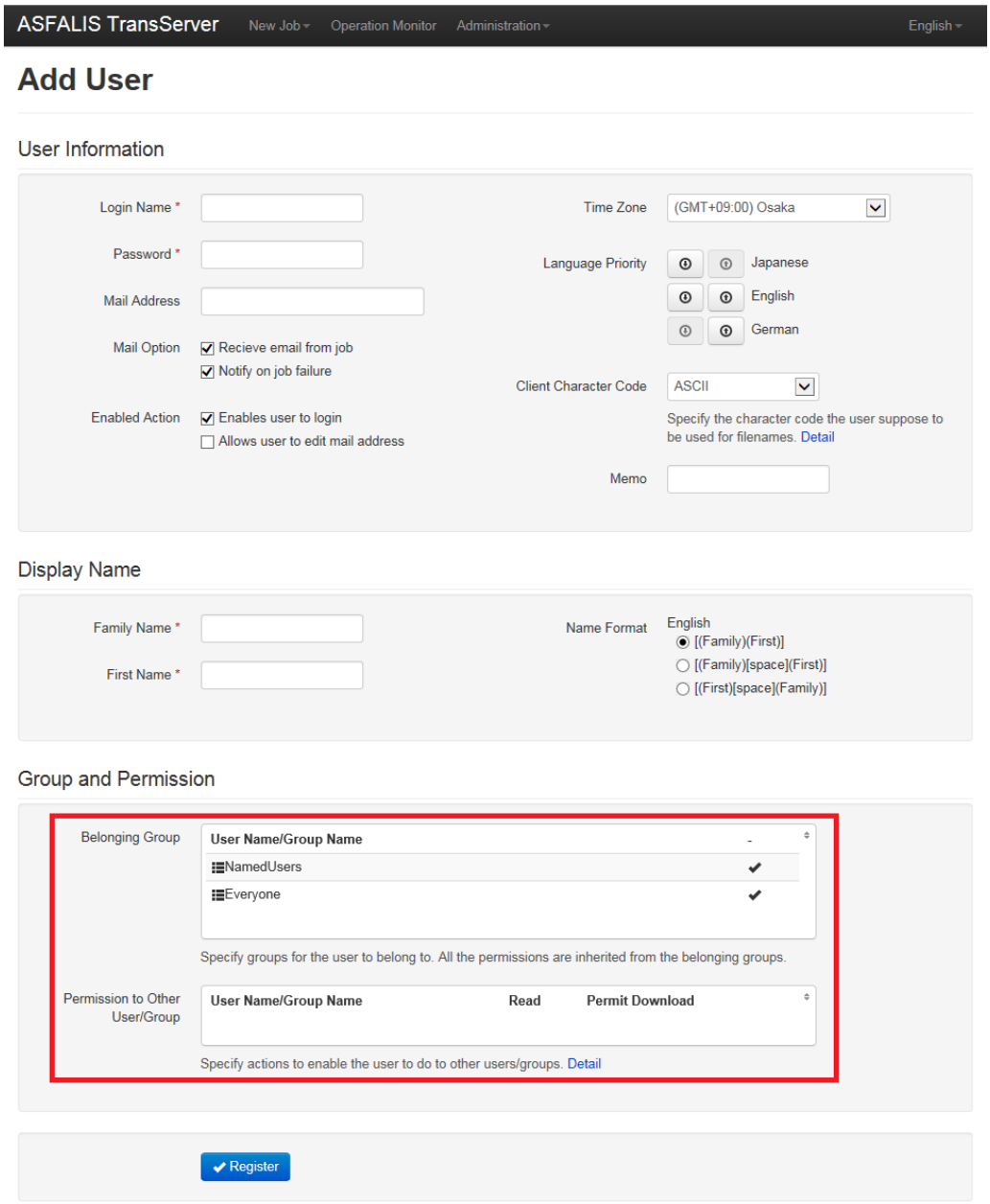

Note)
Users have permission for themselves, and also permission for the Group which they belong to.

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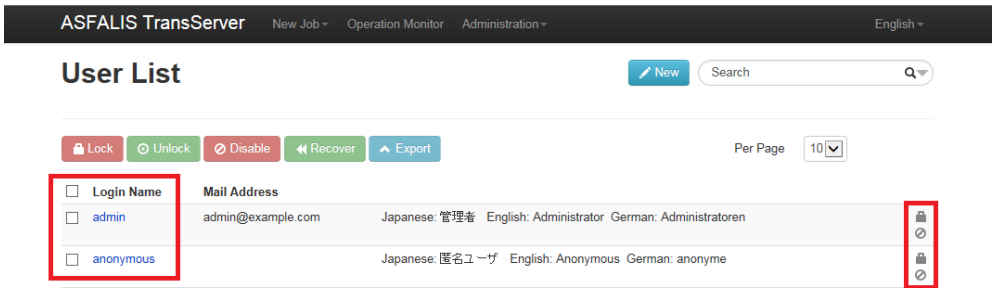
5. Other Functions for Administration

5.1. User Administration

Users in Administrators or UserAdmins group are able to

- edit User information and display name
- give Users permission to log in
- delete/recover Users

1. Select [Administration] > [User Administration].
2. Click "Login Name" to edit the profile.



Hint)
Administrator can control User settings on Users List as below.

Enable Login		Disable Login	
Delete User		Recover	

You can recover deleted Users to enable them to log in again from this list. That is why deleted Users remain in the list.

Hint)
You can export Users in JSON format file. Please refer to [12.7.1, “Exporting Users”] for the details.

5.2. Group Administration

Users in Administrators or UserAdmins group can use the functions listed below.

5.2.1. Group List

Select [Administration] > [Group Administration], then you can view the list of groups registered in ASFALIS TransServer.

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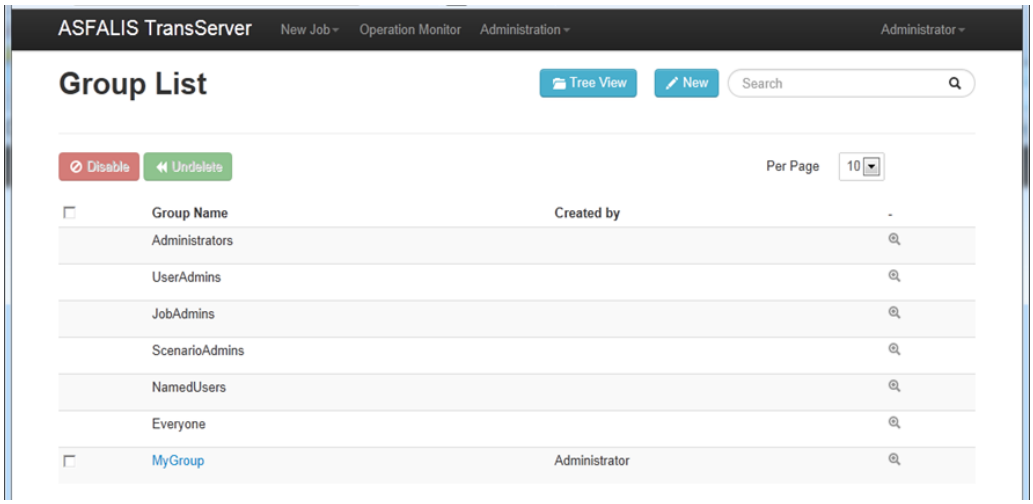


Default Groups: "Administrators", "UserAdmins", "JobAdmins", "ScenarioAdmins", "NamedUsers", "Everyone" cannot be edited or deleted. If you want to add members into these groups, please use [Add User] or [Edit User].

Hint)
You can manage group settings on Group List as below.

Add/Edit Groups		Disable Login		Recover	

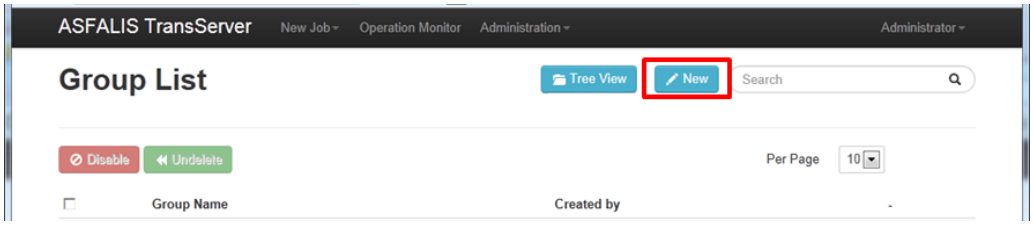
You can only disable the groups that fill the conditions below.

- The group is not specified as Root group.
- The group has no parent groups.
- The group has no members.

Hint)
You can view the group information in detail by clicking on this icon( ).

5.2.2. Add/Edit Groups

If you would like to add a new Group, click [New] button. If you would like to edit a group, select group name in the group list page.



You can set the following items.

- Group Name

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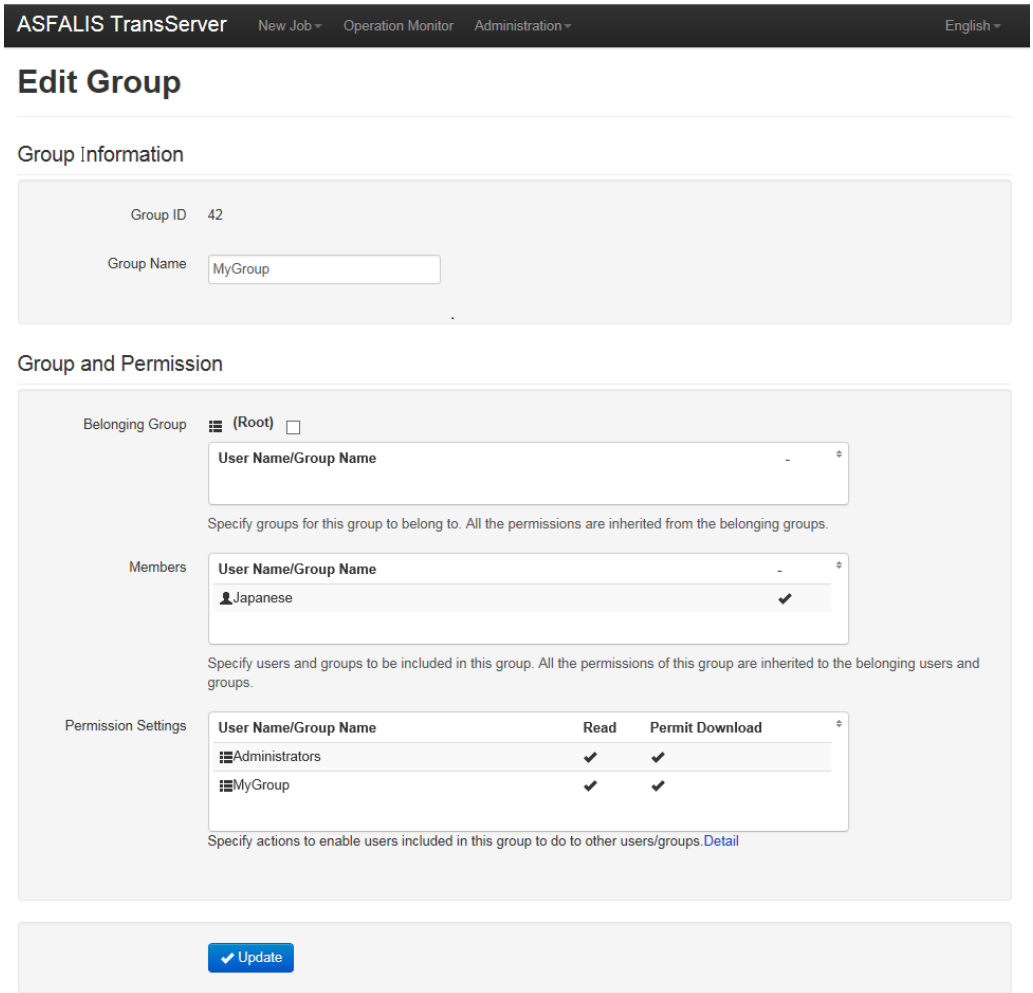
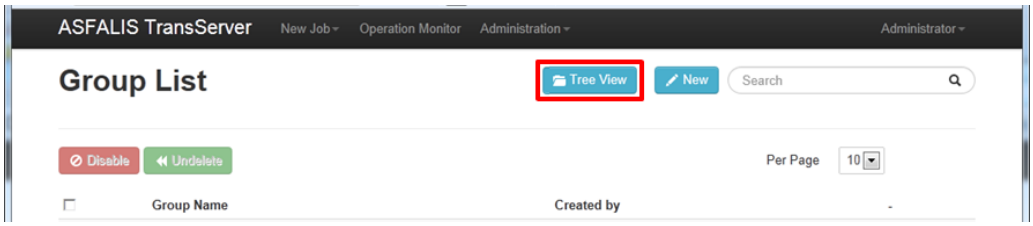
- Parent Groups (You can choose whether you want to specify a root group)
- Members
- Permission to other Groups or Users in other groups



5.2.3. Group Tree View

Select [Tree View] button under the group list view page.



A structure tree will be displayed, which shows the parent - children groups starting from "Root Groups."
You can edit the group information like its name, its affiliation Users etc. on the group which you have checked in the check box.

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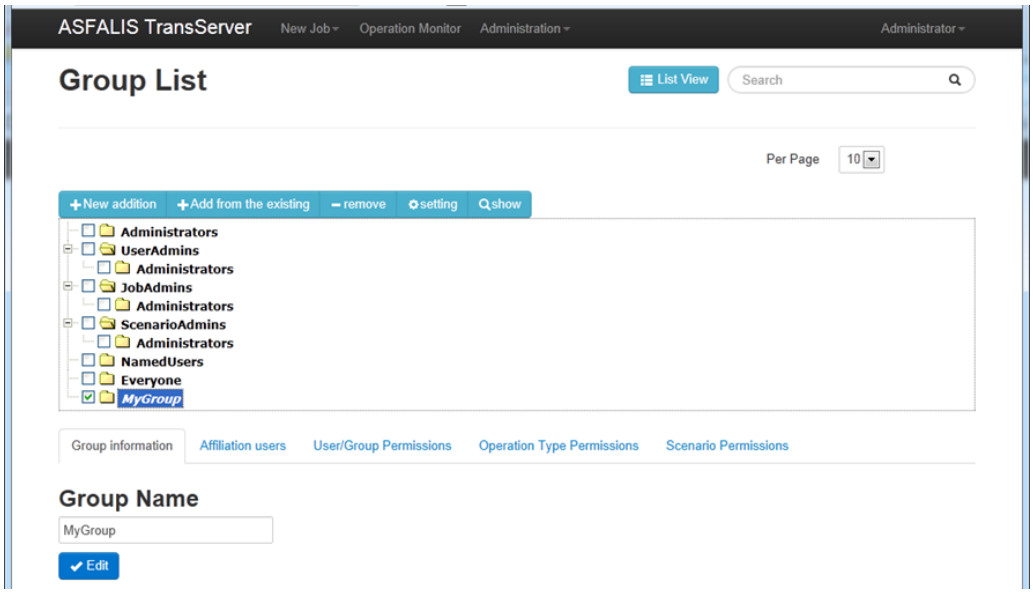

5.3. Operation Type Administration

See section [3.1, “Operation Type”].

5.4. Operation

5.4.1. Bulk-create Operations

This section explains how to bulk-create Operations for all existing Users/Groups except for built-in ones, or for specific Users/Groups specified in a separate file. Please ensure to specify the Operation Type by its ID or unique alias.

- Bulk-create for All Users

  Run the following command to bulk-create Operations for all Users except "admin" and "anonymous" Users that are created by the system by default.

  ```
  bundle exec rake ats:job_lots:bulk_private_create TARGET=ALL_USERS
  JOB_LOT_TEMPLATE_ID=1
  ```

  or

  ```
  bundle exec rake ats:job_lots:bulk_private_create TARGET=ALL_USERS
  JOB_LOT_TEMPLATE_UNIQUE_ALIAS=job_lot_template_SAMPLE
  ```

  Each Operation will be created with the name "Private (user: <UserName>)". <UserName> will be replaced by each User’s display name in the default language. In case the display name is not set for the default language, the display name available in the most prioritized language will be used instead.

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- Bulk-create for All Groups

  Run the following command to bulk-create Operations for all Groups except "Administrators", "UserAdmins", "JobAdmins", "ScenarioAdmins", "NamedUsers", "Everyone" Groups created by the system by default.

  ```
  bundle exec rake ats:job_lots:bulk_private_create TARGET=ALL_GROUPS
  JOB_LOT_TEMPLATE_ID=1
  ```

  or

  ```
  bundle exec rake ats:job_lots:bulk_private_create TARGET=ALL_GROUPS
  JOB_LOT_TEMPLATE_UNIQUE_ALIAS=job_lot_template_SAMPLE
  ```

  Each Operation will be created with the name "Private (group: <GroupName>)". <GroupName> will be replaced by each Group's display name in the default language. In case the display name is not set for the default language, the display name available in the most prioritized language will be used instead.

- Bulk-create for Specified Users/Groups

  Specify the Users/Groups to create Operations for in the following format, and run the following command to bulk-create Operations for specified Users/Groups. Replace the "sample.txt" by the absolute file path to the text file prepared in the following format. The line break is not required.

  ```
  bundle exec rake ats:job_lots:bulk_private_create TARGET=FILE
  FILE_PATH=sample.txt JOB_LOT_TEMPLATE_ID=1
  ```

  or

  ```
  bundle exec rake ats:job_lots:bulk_private_create TARGET=FILE
  FILE_PATH=sample.txt JOB_LOT_TEMPLATE_UNIQUE_ALIAS=job_lot_template_SAMPLE
  ```

  Prepare a text file in the following format.

  ```
  <specifier_key><tab><specifier_value><tab><job_lot_template_id_key><tab><job_lot
  _template_id><tab><name_locale1><tab><name_value1><tab><name_locale2><tab><name_
  value2><tab>···
  ```

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Note)

- Replace the "<tab>" by the tab space.
- Replace the "..." by the combination of the locale "<name_locale>" and the display name in that language "<name_value>" if you wish to name the Operation in the third, fourth languages, too.
- Please note that Operations bulk-created for specified Users will be set as the "Startup" Operation for respective User.

Key	Description		Mandatory
specifier_key	Specify the User/Group to create an Operation for.	Select how to specify the User/Group by either of following keys. * user_login_name * group_id * group_unique_alias	Yes
specifier_value		Specify the actual value in the form specified with "specifier_key".	
job_lot_template_id_key	Specify the Operation Type.	Use this key to create an Operation under a specific Operation Type.	No (*1)
job_lot_template_id		Specify by the Operation Type ID.	Yes when "job_lot_template_id_key" is set
name_locale* (* is replaced with 1,2,...)	Specify the display name of the created Operation. You can set the display name for multiple language as required.	Select the language to set the display name for by either of the following keys. en-US, ja-JP, de-DE, zh-CN	No (*2)
name_value* (* is replaced with 1,2,...)		Specify the display name for the specified language.	Yes when "name_locale*" is set

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Note)
(*1): When the Operation Type is not specified, a new Operation Type will be created automatically with a name in the following naming rule, and an Operation will be created under that Operation Type.

- When creating an Operation for a specified User
  "User <User's display name available in the most prioritized language> Dedicated"
- When creating an Operation for a specified Group
  "Group <Group's display name available in the most prioritized language> Dedicated"

Note)
(*2): When the display name of the created Operation is not specified, a new Operation will be created with a name in the following naming rule.

- When creating an Operation for a specified User
  "Private (User: <User's display name available in the most prioritized language>)"
- When creating an Operation for a specified Group
  "Private (Group: <Group's display name available in the most prioritized language>)"

Sample text file:

```
user_login_name user1   job_lot_template_id 3   en-US   TEST
user_login_name user2
group_unique_alias  group3  job_lot_template_id 4
group_id    12  job_lot_template_id 5   en-US   Project A   de-DE   Projekt A
```

5.5. Job Administration

5.5.1. Basic Operation

Administrator can control Jobs as follows

- Stop or execute Jobs
- Delete or Recover Jobs
- Change the priorities of Jobs

1. Select [Administration] > [Job Administration].
2. Click "Job ID" that you would like to edit.

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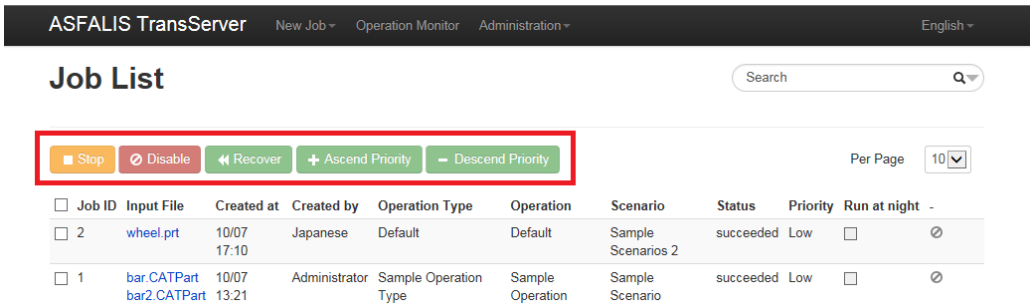
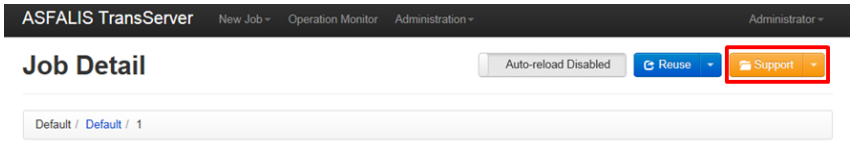


Note)
Once you stop a Job, you cannot restart it. You have to execute it again.

Hint)
In case that the server configuration "web.common.admin_show_job_options" is set as "FALSE" (this is the default value), columns for "Priority" is hidden.

Hint)
When the following two conditions are met, the [Support] button will be displayed in the "Job Detail" page.

- The login User belongs to "Administrators" or "JobAdmins" group
- Execution folder of the Job is downloadable for the investigation.
  To keep execution folders of Jobs for the investigation, set the server configuration "scheduler.common.on_error_keep_directory" or "scheduler.common.keep_directory".
  See the description of server configurations about details.



When [Support] button is displayed, these three functions are available.

- Download Execute Directory: downloading all the files and folders in executed directory as zipped archive.
- Download Execute Directory without Models: downloading all the files and folders in executed directory as zipped archive except filename matching server configuration "system.filename.model_pattern".
- Delete Execute Directory: deleting executed directory. Once you delete it, it will be deleted completely and you can never download the same Job directory again.

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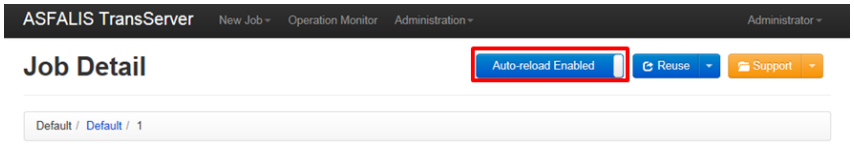
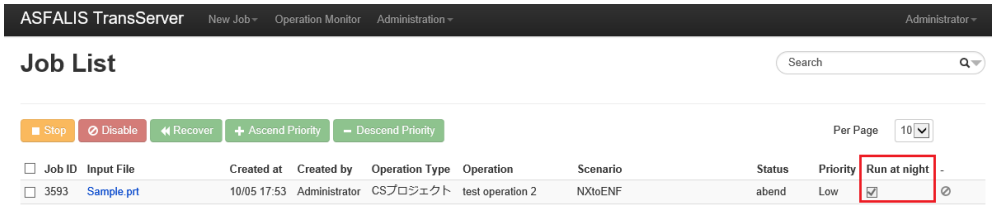
Hint)
You can enable auto-reload of the "Job Detail" page by enabling [Auto-reload] button, and set the time interval from [Server Configuration] with the following parameter. (Set to five seconds by default.)
web.common.auto_reload_interval_seconds



5.5.2. Run Jobs at Specified Time Slot (Run at night)

This section explains how to set to run Jobs only at specified time slot.

1. Set TRUE for [Server Configuration] > "web.common.admin_show_job_options".
2. Specify the time slot to run Jobs with [Server Configuration] > "scheduler.common.nighttime_in_utc".
   Please ensure to specify in UTC (Coordinated Universal Time). Separate by commas when specifying multiple time slots.
   E.g.,) 18:00-23:00, 2:00-6:00
3. Select [Administration] > [Job Administration] to open "Job List" page.
4. Check "Run at night" checkbox of Jobs you wish to run at the specified time slot.



Hint)
Set "web.common.show_job_options" to "TRUE" to allow Users to enable "Run at night" option in "Operation Detail" page.

5.6. Scenario Administration

Administrator can edit Scenarios as follows

- Disable or Recover Scenarios
- Edit Scenarios
- Copy Scenarios

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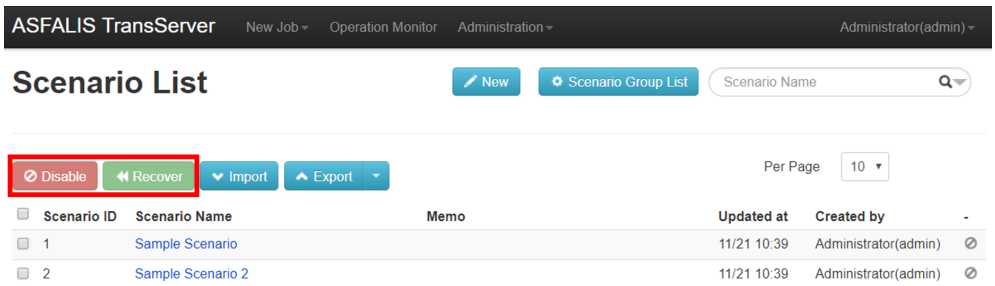
5.6.1. Disable or Recover Scenarios

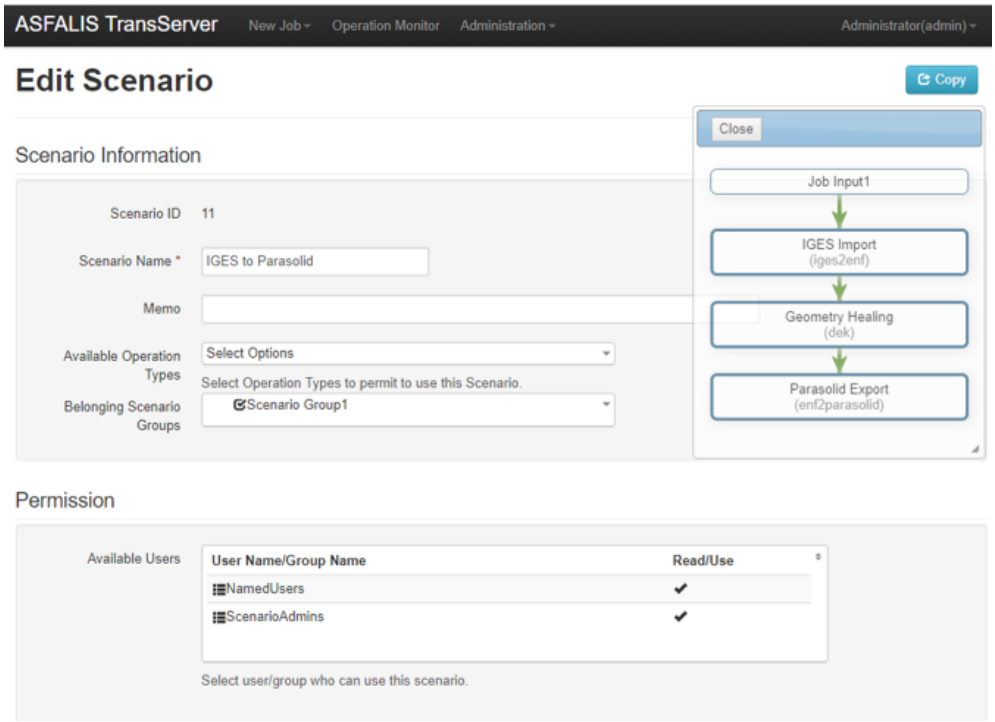
1. Select [Administration] > [Scenario Administration].
2. Select a Scenario and click [Disable] and/or [Undelete] button.



Hint)
You can import and export Scenarios in JSON format file. Please refer to [12.6.4, “Importing Scenarios”] and [12.7.3, “Exporting Scenarios”].

5.6.2. Edit Scenarios

1. Select [Administration] > [Scenario Administration].
2. Click on "Scenario Name" of the Scenario to edit.
3. You can edit parameters for existing Components that you have set before. After editing the values of parameters, click [Update] to reflect your changes.



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Hint)
Scenarios become unamendable once they have been used so that you cannot add or delete Components in them. You should confirm which Components are required to complete this translation and gain what you need.

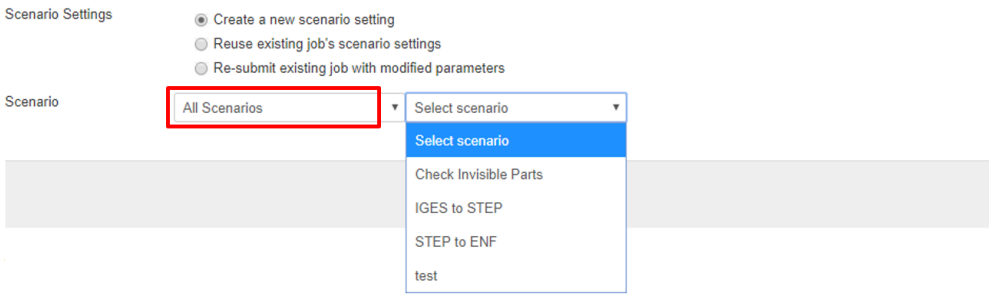
5.6.3. Copy Scenarios

You can copy Scenarios by clicking [Copy] button, and then you can edit and register as another Scenario.

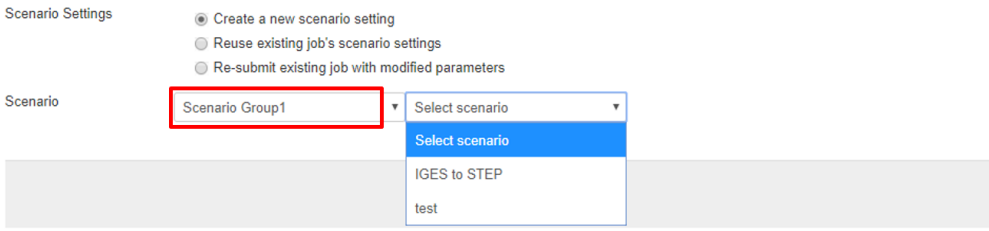
5.6.4. Group Scenarios

Set [Server Configuration] > "web.common.enable_scenario_grouping" to "TRUE" to enable a function to group Scenarios. You can filter the Scenarios to show in the pull-down list in "New Job" page by selecting a Scenario Group to show.

- No filter (All Scenarios are shown)



- Filtered by a Scenario Group



Users who belong to Administrators and/or ScenarioAdmins groups can also further edit as follows;

a. Create/Edit Scenario Groups
   Create new Scenario Groups by specifying the group name and belonging Scenarios, or select an existing Scenario Group in "Scenario Group List" page to edit its groups name and/or belonging Scenarios.

   - Creating new Scenario Groups

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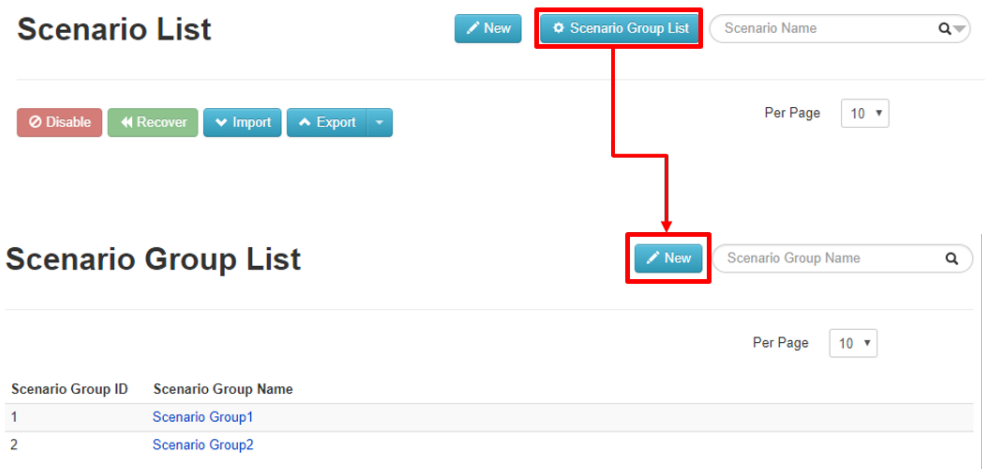
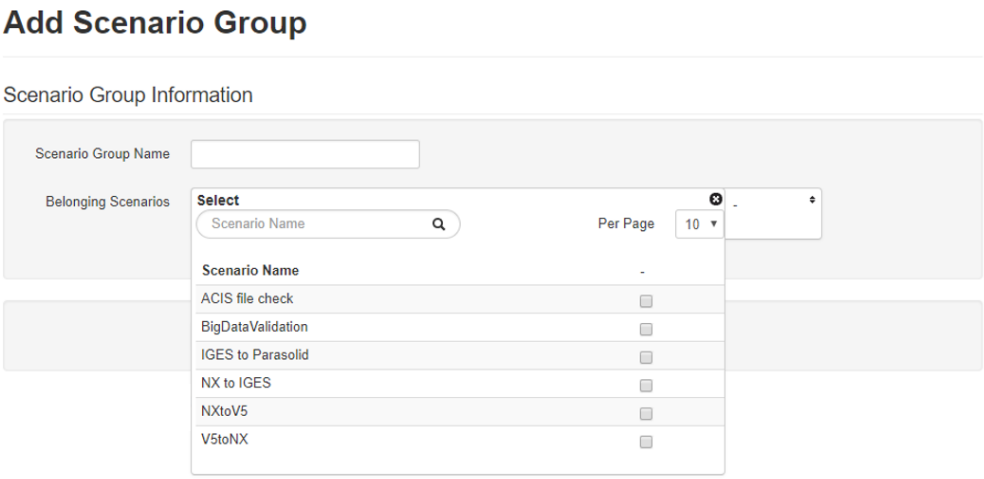
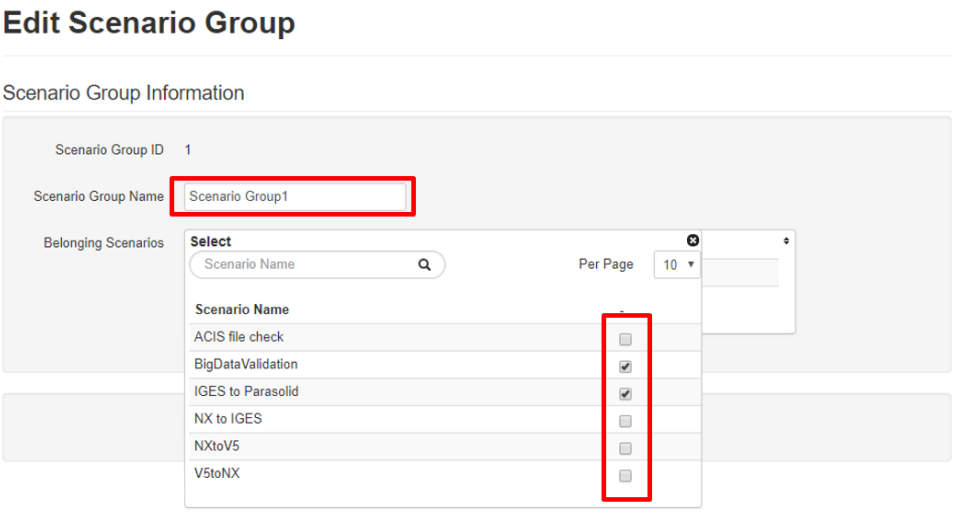


- Setting Scenario Group names and belonging Scenarios



- Editing exiting Scenario Groups



b. Set Scenario Groups to Belong to
   Set Scenario Groups to belong to when creating new Scenarios.

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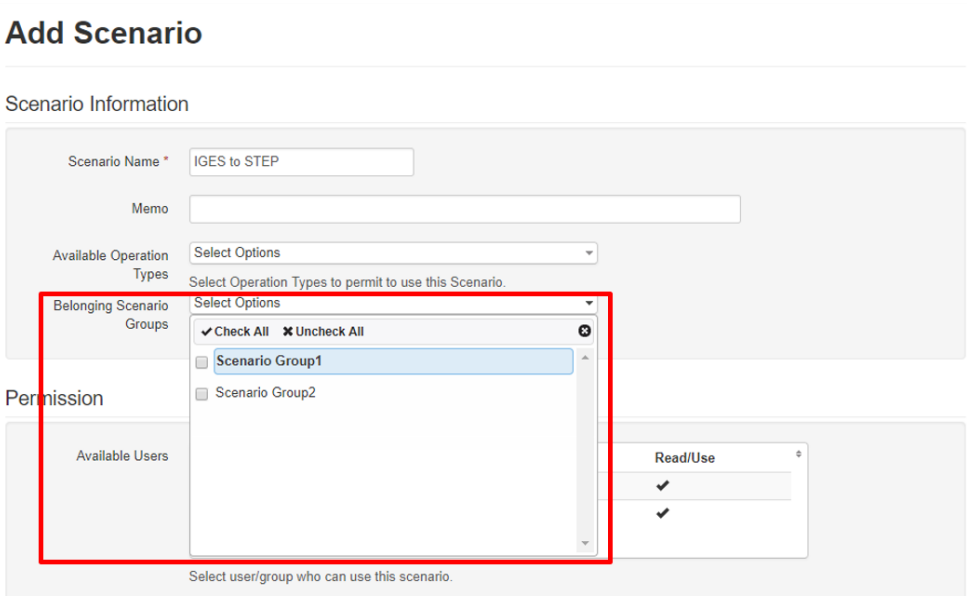
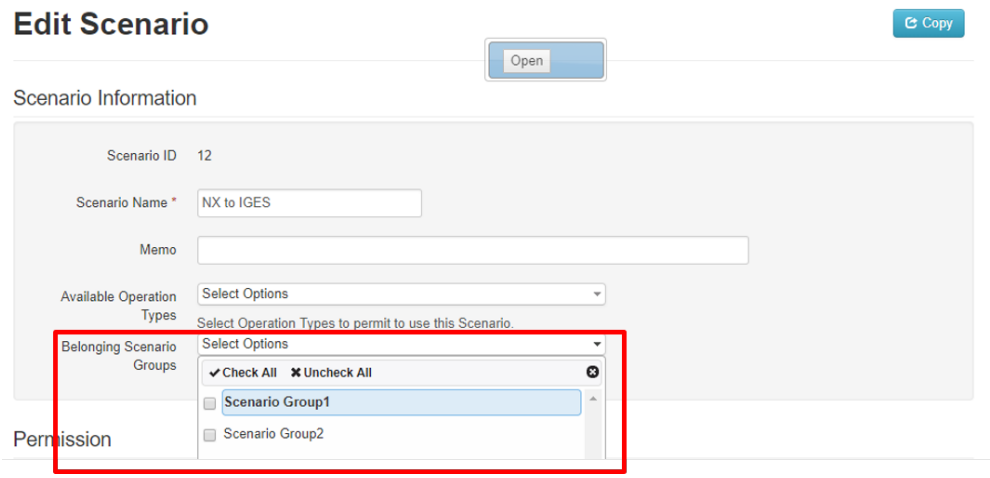


Edit existing Scenarios on the Scenario Groups to belong to.



5.6.5. Notes on Scenario Creation

Below are some notes on creating/editing Scenarios.

- Please note that you can add/delete Components only when creating new Scenarios or editing Scenarios that have not been used yet.
- Please ensure to set fixed values with "set value now" option for parameters of Scenarios that will be used for child Jobs. Please refer to [10.1.1, “EX) CATIA V5 to IGES Translation”] for the details.

5.7. Component Administration

5.7.1. Enable/Disable the Components and Parameters

You can enable or disable the Components and parameters. The setting affects only when editing a Scenario.

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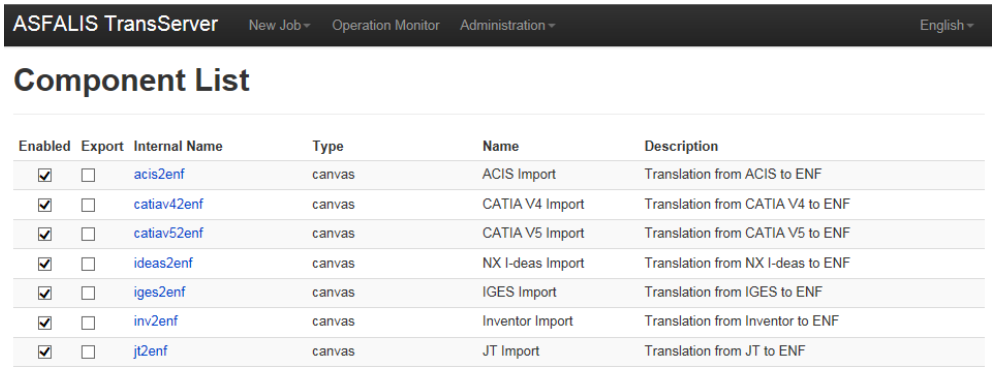
Components/Sub-Components

- When creating a new Scenario
  Only enabled Components and Sub-Components will be shown in the pull down list.
- When editing a Scenario
  Only enabled Components and Sub-Components will be shown in the pull down list.
  Disabled Components or Sub-Components will be shown in the pull-down list if they are used in the Scenarios.

Parameters

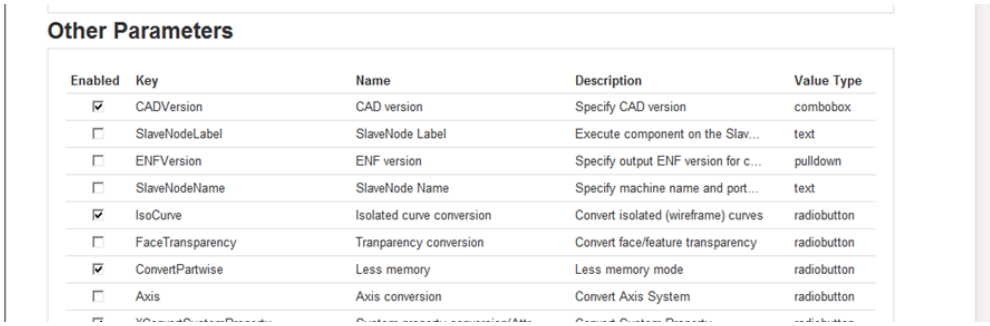
- When creating a new Scenario
  Only enabled parameters will be shown in the field.
- When editing a Scenario
  Disabled parameters will be shown in the field if they are used in the Scenarios.

1. Select [Administration] > [Component Administration].
2. In "Component List" page, you can specify the status (enabled or disabled) of Components. When you check or uncheck the checkbox, the status will be saved.



Enabled	Export	Internal Name	Type	Name	Description
☑	☐	acis2enf	canvas	ACIS Import	Translation from ACIS to ENF
☑	☐	catiav42enf	canvas	CATIA V4 Import	Translation from CATIA V4 to ENF
☑	☐	catiav52enf	canvas	CATIA V5 Import	Translation from CATIA V5 to ENF
☑	☐	ideas2enf	canvas	NX I-deas Import	Translation from NX I-deas to ENF
☑	☐	iges2enf	canvas	IGES Import	Translation from IGES to ENF
☑	☐	inv2enf	canvas	Inventor Import	Translation from Inventor to ENF
☑	☐	jt2enf	canvas	JT Import	Translation from JT to ENF

3. Click "Internal Name", then page "Component Detail" will open. In "Component Detail" page, you can specify the status (enabled or disabled) of Sub-Components and parameters. When you check or uncheck the checkbox, the status will be saved.



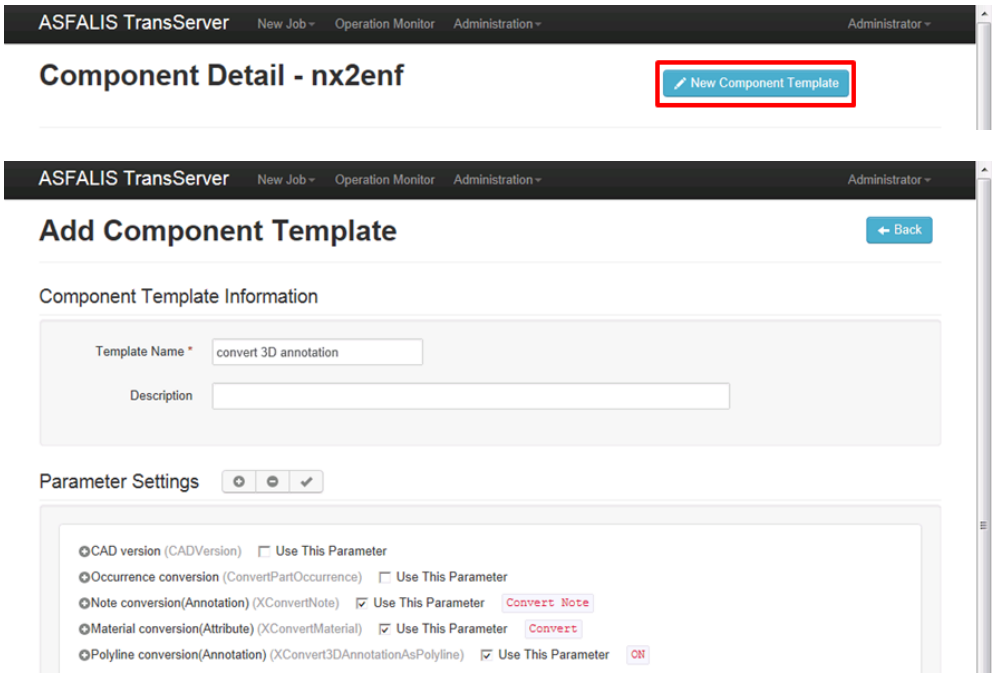
Enabled	Key	Name	Description	Value Type
☑	CADVersion	CAD version	Specify CAD version	combobox
☐	SlaveNodeLabel	SlaveNode Label	Execute component on the Slav...	text
☐	ENFVersion	ENF version	Specify output ENF version for c...	pulldown
☐	SlaveNodeName	SlaveNode Name	Specify machine name and port...	text
☑	IsoCurve	Isolated curve conversion	Convert isolated (wireframe) curves	radiobutton
☐	FaceTransparency	Tranparency conversion	Convert face/feature transparency	radiobutton
☑	ConvertPartwise	Less memory	Less memory mode	radiobutton
☐	Axis	Axis conversion	Convert Axis System	radiobutton

5.7.2. Component Templates

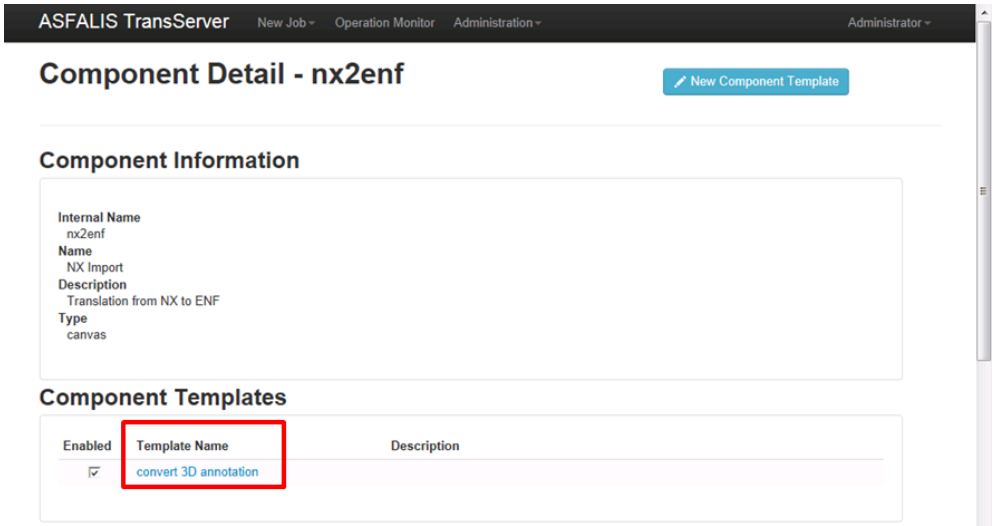
You can register Component configurations shared among Scenarios.

1. Go to "Component Detail" page as described in section [5.7.1, “Enable/Disable the

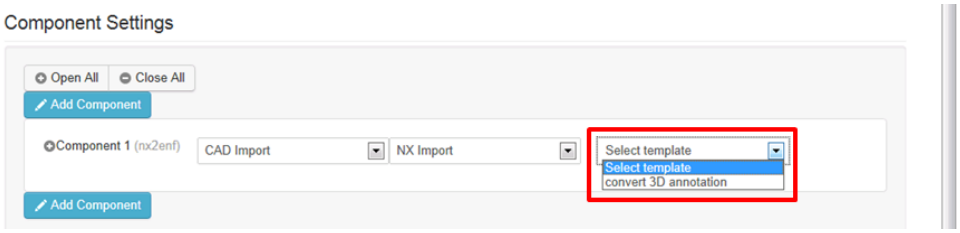
Components and Parameters”], then click [New Component Template] and register a Component Template.



2. Registered Component Templates will be listed in "Component Templates" section of "Component Detail" page.
   Click "Template Name" then you can edit the Component Template.



3. When you register/edit Scenarios, you can select Component Template for it if the Component has Component Template.



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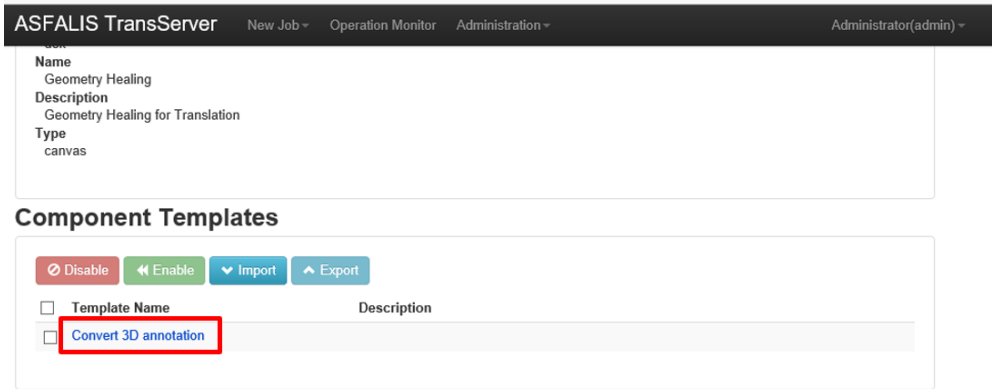
Hint)
When a Scenario with a Component Template is not used in Jobs,

- You can add Sub-Components to the Component Template or delete them from it.
- You can exchange the Component Template in the Scenario or stop using it.

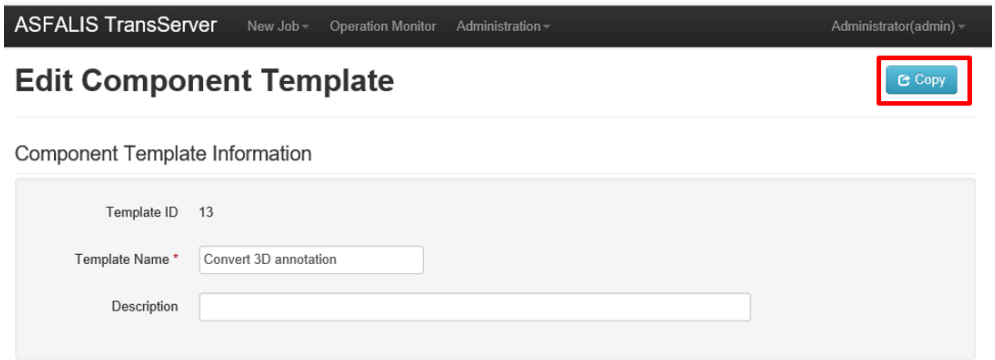
5.7.3. Copy Component Templates

You can create new Component Templates by cloning existing ones as follows.

1. Select [Administration] > [Component Administration] from the menu bar, and select a Component to create a Component Template from the list.
2. Select a Component Template to clone in "Component Detail" page > "Component Templates" list.



3. Click [Copy] at top right corner in "Edit Component Template" page.



4. Edit the template name, description, and parameter settings as required, and then click [Register] at the bottom.

5.8. Server Configurations

ASFALIS TransServer can be configured with various settings to change its behavior according to the purposes and requirements. Please refer to the description which appears with each

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setting for more details.

5.8.1. Monitoring Functions

ASFALIS TransServer has a function that monitors the processing status and volume capacity, and notifies you by email when a problem occurs. For these functions, change the settings from the server configuration as needed.
For volume capacity monitoring, not only will you be notified by email, but also by a warning message appearing on the operation screen. In addition, if a problem occurs, ASFALIS TransServer processing will partially stop. Please refer to [5.8.2, “Monitor Free Storage Space for Resource / Shared Folders”] for more details.

Monitoring Target	Monitoring Item
Volume where Resource / Shared Folder belongs	Free Storage
Job Execution Status	Failure or Termination
Number of Jobs in Queue	Overflow of Jobs in Queue
Backup	Failure
Execution Status of Processes (System Monitoring)	Process Termination

5.8.2. Monitor Free Storage Space for Resource / Shared Folders

This is a function to set a limit on the remaining free storage space on the volume where the Resource / Shared folder is, and set up to receive warning notices, restrict some functionalities etc. when the remaining free storage space reaches the specified value to prevent errors due to storage shortage.
There are two levels, "soft limit" and "hard limit" as described below. Please set values as appropriate for your use.

	Email Notification	Warning Message on Screen	Processing Suppression
Soft Limit	○	○	-
Hard Limit	○	○	○

- **Soft Limit**
  Please set a storage space sufficient for ASFALIS TransServer to operate normally with following parameters. Both are set to 50 GB by default. A warning notice will appear on ASFALIS TransServer browser pages, and emailed to Administrator (specified recipient address) when the remaining free storage space gets lower than specified value.

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  - Resource folder: "system.resource.soft_limit.size"
  - Shared folder: "system.shared_directory.soft_limit.size"

- **Hard Limit**
  Please set a minimum storage space for ASFALIS TransServer to operate normally with following parameters. Both are set to 5 GB by default. A warning notice will appear on ASFALIS TransServer browser pages, and emailed to Administrator (specified recipient address) when the remaining free storage space gets lower than specified value to notify of following functional restrictions;

  - Job input file upload / Job submission
  - Login except for users who belong to Administrators / UserAdmins / JobAdmins / ScenarioAdmins group(s) when "web.login.hard_limit_authority.enabled" is set to TRUE

  Ongoing Component-processing will be terminated as well.

  - Resource folder: "system.resource.hard_limit.size"
  - Shared folder: "system.shared_directory.hard_limit.size"

5.8.3. Email Notification

Set the following parameters from [Administration] > [Server Configuration] to utilize email notification. Set the category filter to "Email Settings" to show parameters related to email notification only.

	Configuration Name	Description
1	scheduler.error_mail.sender	Specify the sender email address for notifications auto-sent by ASFALIS TransServer. (Mandatory)
2	system.mail.enable_smtp_authentication	Specify whether authenticating to SMTP server. (Mandatory)
3	system.mail.enable_smtp_tls	Specify whether using SMTP over TLS (Mandatory)
4	system.mail.smtp_authentication_type	Specify SMTP authentication type(PLAIN, LOGIN or CRAM-MD5) in case of an authenticating to SMTP server. (Required when "system.mail.enable_smtp_authentication" is set to "TRUE".)
5	system.mail.smtp_default_domain	Set Default domain on sending Email. (Optional)
6	system.mail.smtp_port	Sets SMTP port (Mandatory)
7	system.mail.smtp_server	Sets SMTP server FQDN. (Mandatory)

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	Configuration Name	Description
8	system.mail.user_name	Specify user name in case of an authenticating to SMTP server. (Required when "system.mail.enable_smtp_authentication" is set to "TRUE".)
9	system.mail.user_password	Specify password in case of an authenticating to SMTP server. (Required when "system.mail.enable_smtp_authentication" is set to "TRUE".)

Below are the parameters for error notifications for each specific error type. Please set as required.

- Job Execution Error

	Configuration Name	Description
1	scheduler.error_mail.body	Specify body of notification message in case of Job execution error.
2	scheduler.error_mail.recipient	Specify recipient of notification message in case of Job execution error.
3	scheduler.error_mail.subject	Specify subject of notification message in case of Job execution error.

- Overflow of Jobs in Queue

	Configuration Name	Description
1	scheduler.overflow_mail.body_on_warning	Specify body of waiting Job overflow warning mail.
2	scheduler.overflow_mail.recipient	Specify recipient of waiting Job overflow warning mail. If you want to specify multiple values, separate them with commas.
3	scheduler.overflow_mail.subject_on_warning	Specify subject of waiting Job overflow warning mail.
4	scheduler.overflow_mail.body_on_resolved	Specify body of Job overflow resolved notification mail.
5	scheduler.overflow_mail.subject_on_resolved	Specify subject of Job overflow resolved notification mail.

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	Configuration Name	Description
6	scheduler.overflow_mail.threshold	If waiting Jobs of equal to or more than this specified number found, waiting Job overflow warning mail will be sent.

- Job Termination

	Configuration Name	Description
1	scheduler.terminate_mail.body	Specify body of notification message in case of Job termination.
2	scheduler.terminate_mail.recipient	Specify recipient of notification message in case of Job termination.
3	scheduler.terminate_mail.subject	Specify subject of notification message in case of Job termination.

- Backup Error

	Configuration Name	Description
1	system.backup.error_mail_body	Specify body of notification mail in case of backup error.
2	system.backup.error_mail_recipient	Specify recipient of notification mail in case of backup error.
3	system.backup.error_mail_subject	Specify subject of notification mail in case of backup error.

- Process Error Detected by System Monitoring

	Configuration Name	Description
1	system.monitor.error_mail_body	Specify body of notification message in case of monitor error.
2	system.monitor.error_mail_recipient	Specify recipient of notification message in case of monitor error.
3	system.monitor.error_mail_subject	Specify subject of notification message in case of monitor error.

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Note)
It will be detected as a process error by system monitoring function when following process(es) are stopped.
* Apache
* Nginx
* Rails (*1)
* SlaveNode
* MasterController
* QueueController (*1)
* ScriptComponentWorker (*1)
* PerSlavenodeWorker (*1)
(*1): This process restarts automatically within a few seconds, so it will hardly be detected.

- Lack of Free Space of the Volume for Resource Folder - Warning

This is to auto-send a warning message to the address specified with "system.monitor.error_mail_recipient" to request to solve the issue when the remaining free space of the volume where the resource folder is gets lower than the value specified with "system.resource.soft_limit.size". Please refer to [5.8.2, “Monitor Free Storage Space for Resource / Shared Folders”] for the details.

	Configuration Name	Description
1	system.resource.soft_limit.mail_body_on_warning	Specify the body text of the warning message that will be auto-sent to request to solve the issue when the remaining free space of the volume where the resource folder is gets lower than the value specified with "system.resource.soft_limit.size".
2	system.resource.soft_limit.mail_subject_on_warning	Specify the text for the subject of the warning message that will be auto-sent to request to solve the lack of free space when the remaining free space of the volume where the resource folder is gets lower than the value specified with "system.resource.soft_limit.size".
3	system.resource.soft_limit.mail_body_on_resolved	Specify the body text of the notification message that will be auto-sent when the lack of free space of the volume where the resource folder is has been solved.
4	system.resource.soft_limit.mail_subject_on_resolved	Specify the text for the subject of the notification message that will be auto-sent when the lack of free space of the volume where the resource folder is has been solved.

- Lack of Free Space of the Volume for Resource Folder - System Stop

This is to auto-send a notification to the address specified with "system.monitor.error_mail_recipient" to notify that the functional restriction is set when the

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remaining free space of the volume where the resource folder is gets lower than the value specified with "system.resource.hard_limit.size". Please refer to [5.8.2, “Monitor Free Storage Space for Resource / Shared Folders”] for the details.

	Configuration Name	Description
1	system.resource.hard_limit.mail_body_on_warning	Specify the body text of the notification message that will be auto-sent to notify that functional restriction is set when the remaining free space (resource folder) gets lower than the value specified with "system.resource.hard_limit.size".
2	system.resource.hard_limit.mail_subject_on_warning	Specify the text for the subject of the notification message that will be auto-sent to notify that functional restriction is set when the remaining free space (resource folder) gets lower than the value specified with "system.resource.hard_limit.size".
3	system.resource.hard_limit.mail_body_on_resolved	Specify the email body text of the message to notify that the storage shortage has been solved on the volume where the resource folder is. (Free space is greater than the value specified with "system.resource.hard_limit.size".)
4	system.resource.hard_limit.mail_subject_on_resolved	Specify the email subject of the message to notify that the storage shortage has been solved on the volume where the resource folder is. (Free space is greater than the value specified with "system.resource.hard_limit.size".)

- Lack of Free Space of the Volume for Shared Folder - Warning

This is to auto-send a warning message to the address specified with "system.monitor.error_mail_recipient" to request to solve the issue when the remaining free space of the volume where the shared folder is gets lower than the value specified with "system.shared_directory.soft_limit.size". Please refer to [5.8.2, “Monitor Free Storage Space for Resource / Shared Folders”] for the details.

	Configuration Name	Description
1	system.shared_directory.soft_limit.mail_body_on_warning	Specify the body text of the warning message that will be auto-sent to request to solve the issue when the remaining free space of the volume where the shared folder is gets lower than the value specified with "system.shared_directory.soft_limit.size".

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	Configuration Name	Description
2	system.shared_directory.soft_limit.mail_subject_on_warning	Specify the text for the subject of the warning message that will be auto-sent to request to solve the lack of free space when the remaining free space of the volume where the shared folder is gets lower than the value specified with "system.shared_directory.soft_limit.size".
3	system.shared_directory.soft_limit.mail_body_on_resolved	Specify the body text of the notification message that will be auto-sent when the lack of free space of the volume where the shared folder is has been solved.
4	system.shared_directory.soft_limit.mail_subject_on_resolved	Specify the text for the subject of the notification message that will be auto-sent when the lack of free space of the volume where the shared folder is has been solved.

- Lack of Free Space of the Volume for Shared Folder - System Stop

This is to auto-send a notification to the address specified with "system.monitor.error_mail_recipient" to notify that the functional restriction is set when the remaining free space of the volume where the shared folder is gets lower than the value specified with "system.shared_directory.hard_limit.size". Please refer to [5.8.2, “Monitor Free Storage Space for Resource / Shared Folders”] for the details.

	Configuration Name	Description
1	system.shared_directory.hard_limit.mail_body_on_warning	Specify the body text of the notification message that will be auto-sent to notify that functional restriction is set when the remaining free space (shared folder) gets lower than the value specified with "system.shared_directory.hard_limit.size".
2	system.shared_directory.hard_limit.mail_subject_on_warning	Specify the text for the subject of the notification message that will be auto-sent to notify that functional restriction is set when the remaining free space (shared folder) gets lower than the value specified with "system.shared_directory.hard_limit.size".
3	system.shared_directory.hard_limit.mail_body_on_resolved	Specify the email body text of the message to notify that the storage shortage has been solved on the volume where the shared folder is. (Free space is greater than the value specified with "system.shared_directory.hard_limit.size".)
4	system.shared_directory.hard_limit.mail_subject_on_resolved	Specify the email subject of the message to notify that the storage shortage has been solved on the volume where the shared folder is. (Free space is greater than the value specified with "system.shared_directory.hard_limit.size".)

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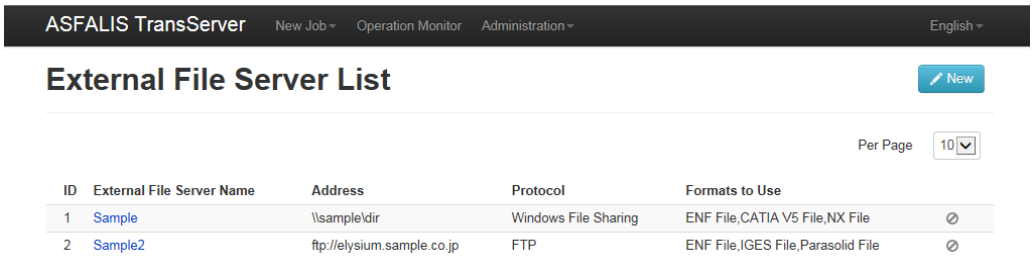
5.9. External File Server Administration

When you enter a new Job or acquire result files, usually you use Web browser. But in ASFALIS TransServer you can enter new Job from files stored in external file servers, and also you can transfer result files to them. You can configure external file servers as follows.

5.9.1. External File Server List

Select [Administration] > [External File Server Administration], then list of external file servers will be displayed.

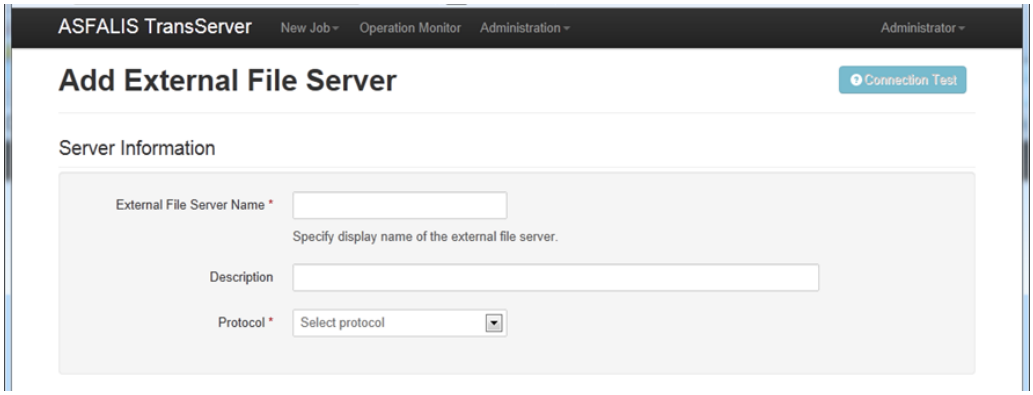


Hint)
You can control server settings on Server List as below.

Disable Server	⊘	Recover	⏪

5.9.2. Add/Edit External File Server

In External File Server List page, select [New] button, then page to add external file server will open. Select each external file server name, then page to edit specified external file server will open.



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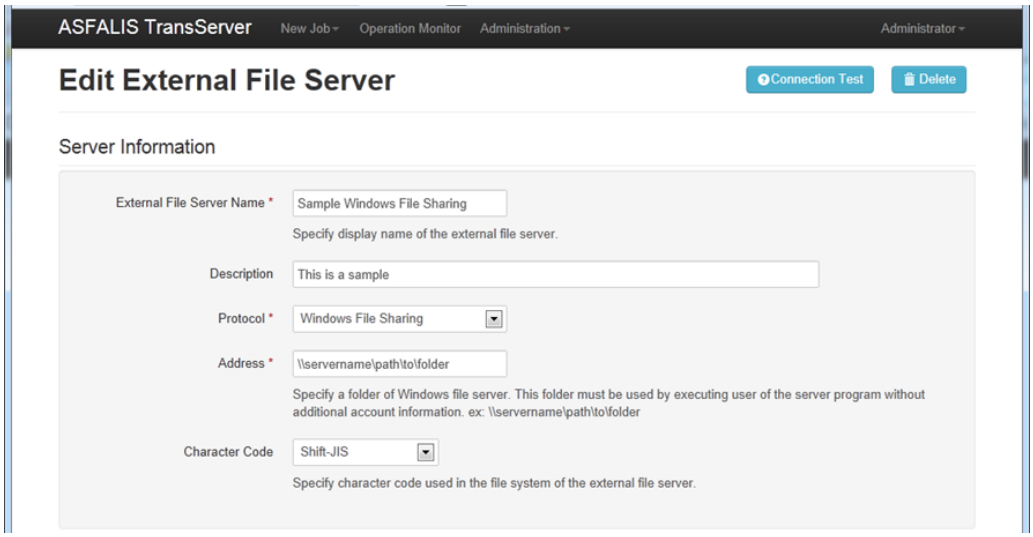

Windows File Sharing and FTP are supported.

Note)
If you would like to use Windows File Sharing protocol, specify shared folders that is available by executing User of the server program without additional account information.

Note)
Do not forget to specify related formats of external file servers. If proper formats are not configured, you cannot use it in entering Jobs nor transferring the results.

5.9.3. Job Entry and Scenarios

When all the Users enter a new Job, they can use external file servers if configured properly. You can configure Scenarios to use "Transfer to Windows File Server" or "Transfer to FTP File Server" in order to transfer result files into external file servers.

5.10. Operation Logs

Administrator can get the detailed information of Scenarios, Jobs, Users and so on.

1. Select [Administration] > [Operation Logs].
2. Select Operation Log Type, User and date info. And click [Search].
3. If you need to check the detail, click[🔍]for each log.

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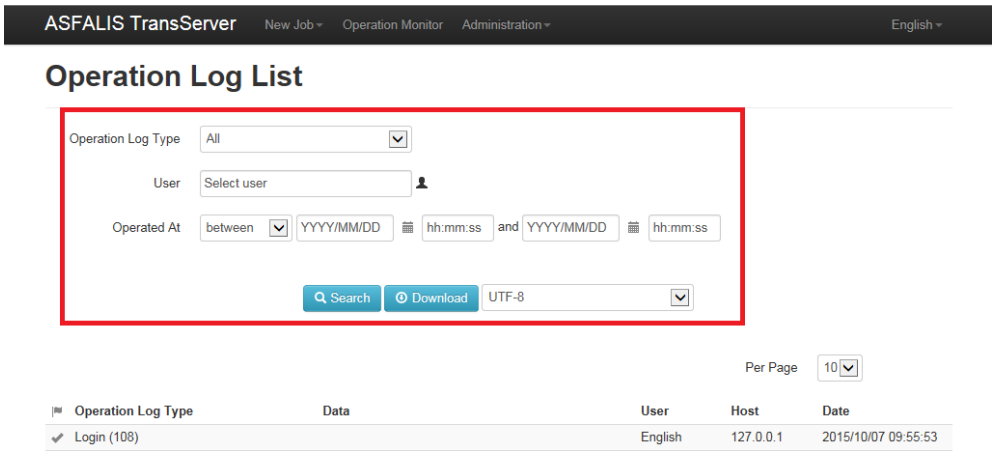
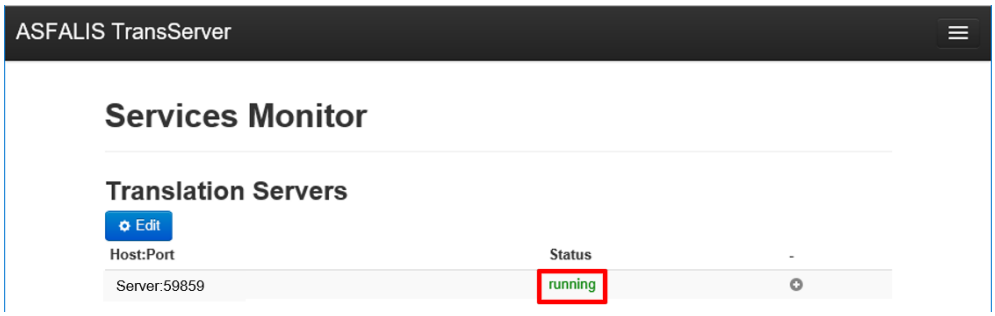


5.11. Services Monitor

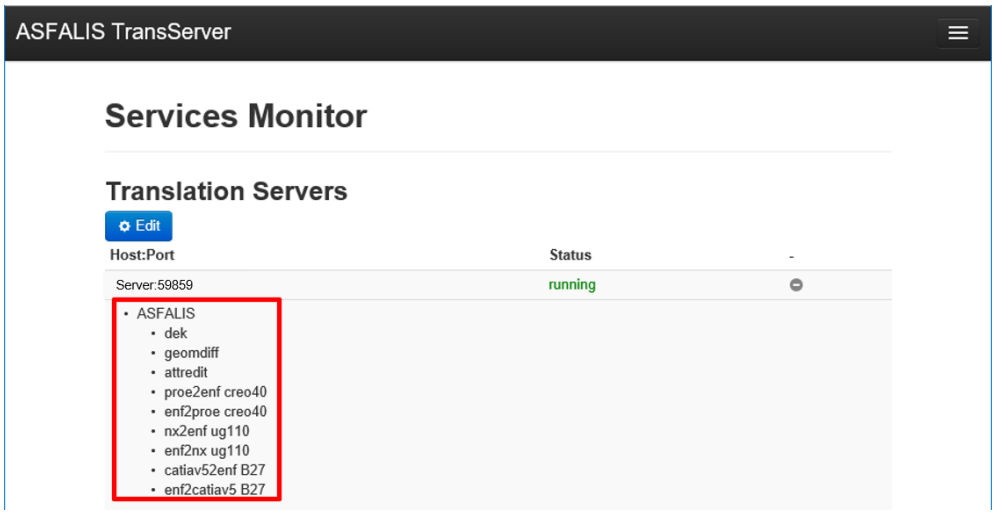
Administrator can confirm the status of Servers (Slave Node).

5.11.1. Check Slave Node Status

1. Select [Administration] > [Services Monitor].
2. Confirm the status of the Slave Node in the "Status" column.



3. Select the Slave Node to confirm the status of Component(s) running on that Slave Node.



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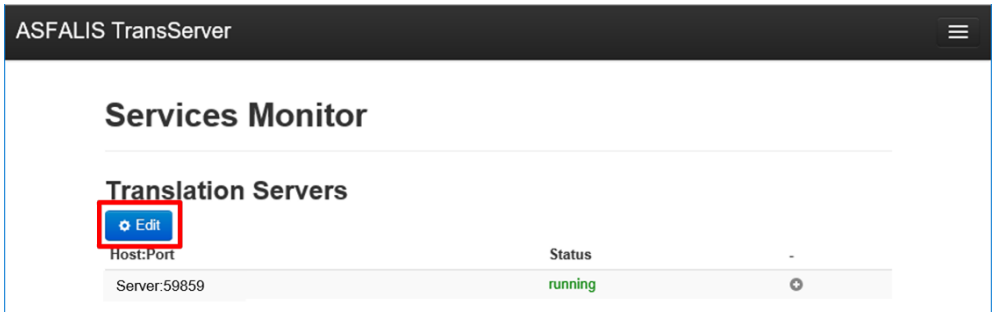
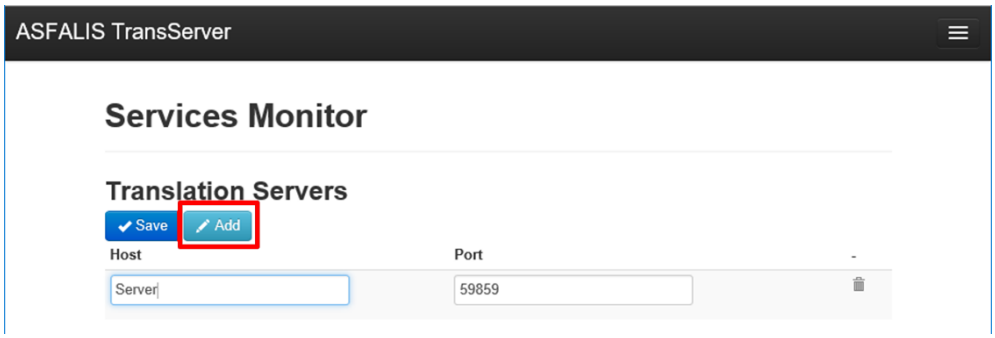
5.11.2. Add Slave Node

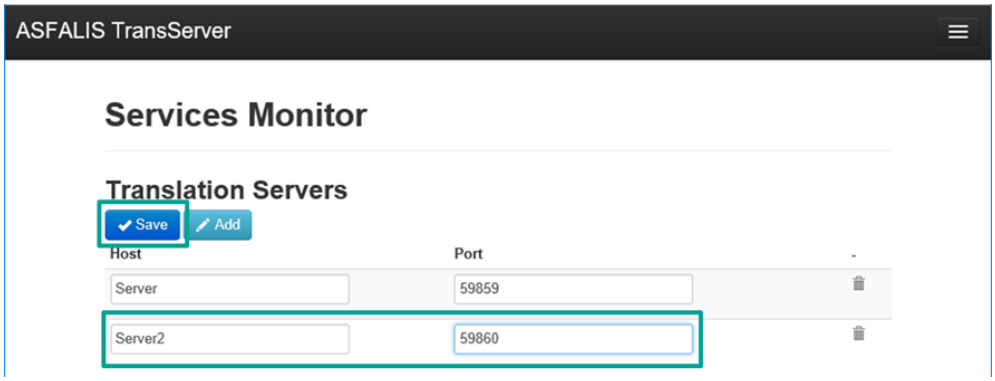
1. Select [Administration] > [Services Monitor].
2. Click [Edit].



3. Click [Add].



4. Enter the Host name and Port number of the Slave Node you will be adding and click [Save].



5.11.3. Delete Slave Node

1. Select [Administration] > [Services Monitor].
2. Click [Edit].
3. Click the bin icon on the right side of the Slave Node you would like to delete.

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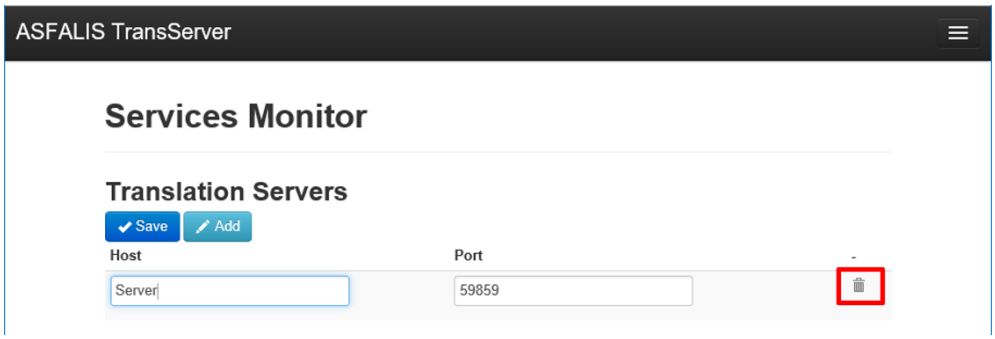


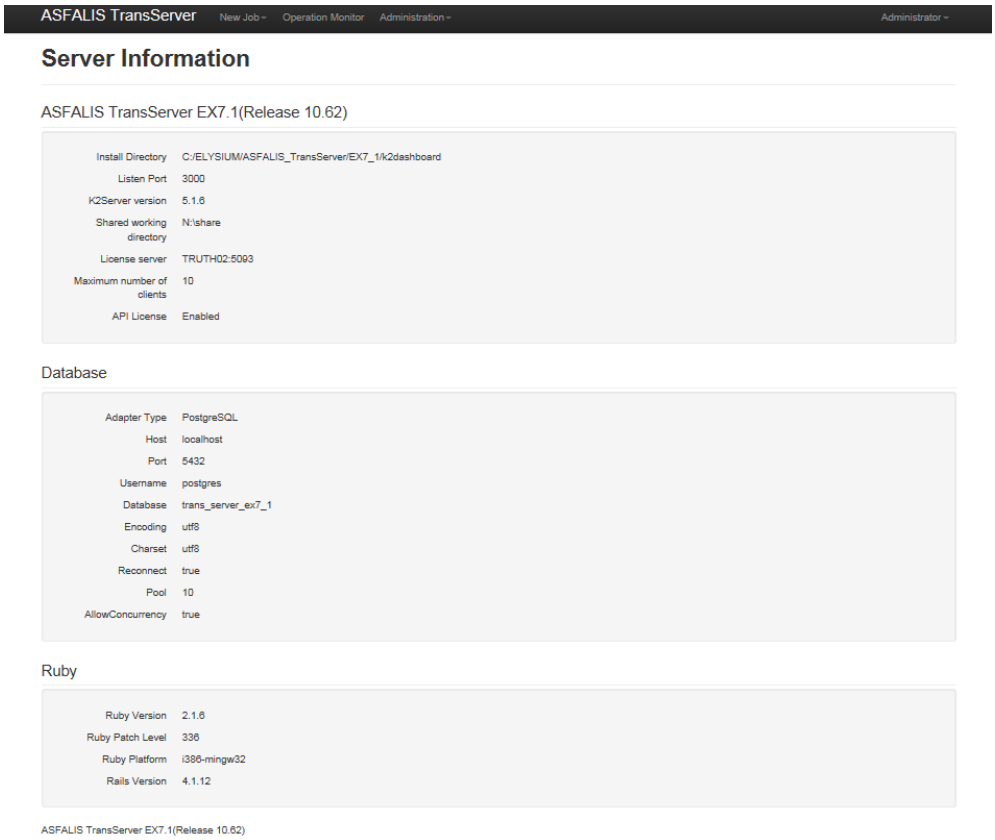
4. Click [Save].

> Hint)
> You can also add/delete Slave Nodes from the Server Settings dialog that appears when selecting [Elysium TransServer] > [Slave Node Configuration] from the Windows Start Menu. Please refer to the Installation Guide for details.

5.12. Server Information

If you need any technical supports, please send email with the information in this page.

1. Select [Administration] > [Server Information].



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6. Back up & Restore

When you reinstall or update ASFALIS TransServer, you need to back up the current setting of ASFALIS TransServer that is saved in the database first. And then restore the setting to new or updated ASFALIS TransServer.
In this chapter you will understand what you need to do for the backup and restore.

6.1. Back up the Database

6.1.1. How to Create a Backup File Automatically

ASFALIS TransServer can create a backup file automatically. Key files and resource files are also backed up. Setup steps are as follows.

1. Select the menu [Administration] > [Server Configurations] and configure the following items appropriately for your environment. Once you have configured the item "system.backup.backup_directory", automatic backup will be performed.

Configuration Name	Description
system.backup.backup_directory	Specify a backup directory. [mandatory]
system.backup.backup_duration	Specify the period to make a backup copy of the files by seconds. If you would like to specify the time to start a backup, leave this field blank and specify at system.backup.backup_cron. [*1]
system.backup.backup_cron	Specify the time to start a backup in cron format. If you would like to specify the period, leave this field blank and specify at system.backup.backup_duration. (*1)
system.backup.backup_target	Specify the backup target. Specify "All" to back up all files, or "Except models and logs" to back up all files except models and logs.
system.backup.backup_retention_count	Specify the maximum number of backup sets to keep. Backup sets will be deleted automatically from the oldest when the total number exceeds this value. Specify zero (0) or a negative number to keep the backup sets unlimitedly.
system.backup.error_mail_recipient	Specify the recipient of notification messages which will be sent in case of backup errors.
system.backup.error_mail_subject	Specify what to write for the subject of notification messages which will be sent in case of backup errors.

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Configuration Name	Description
system.backup.error_mail_body	Specify what to write in the body of notification messages which will be sent in case of backup errors.

(*1): Either one is to be defined.

Hint)
cron format :
cron format includes 5 fields for "time and date" divided by spaces.
Backup/Resource sweeping will be performed at the time specified here.
Please specify the time and date as follows:

field	allowed values
minute	0 - 59
hour	0 - 23
day of the month	1 - 31
month	1 - 12
day of the week	0 - 6 (0 is for Sunday and 6 is for Saturday.)

Asterisk (*) stands for all the available values, so that every day, every hour etc. will be specified with it. You can specify a duration or multiple values, too. Use hyphen"-" to specify the duration, and comma"," to divide multiple values.

cron format	meaning
30 5 * * *	every day at 5:30 a.m.
0 0 1 * *	at 12 a.m. on the first day of every month
0 0-12 * * 6	Every hour from 12 a.m. to 12 p.m. on Saturdays
0,30 * * * *	at every hour on the hour **(:00) and on the half-hour (**:30)

6.1.2. How to Create a Backup File Manually

This section explains how to back up the database, key file for the restoration, and private resource folder manually.

1. Launch the database: Select Windows [Start] > [PostgreSQL 10.*] > [pgAdmin 4].
2. Double-click PostgreSQL 9.4 (localhost:5432, if it was installed by default settings) and type in the password to connect to the server.

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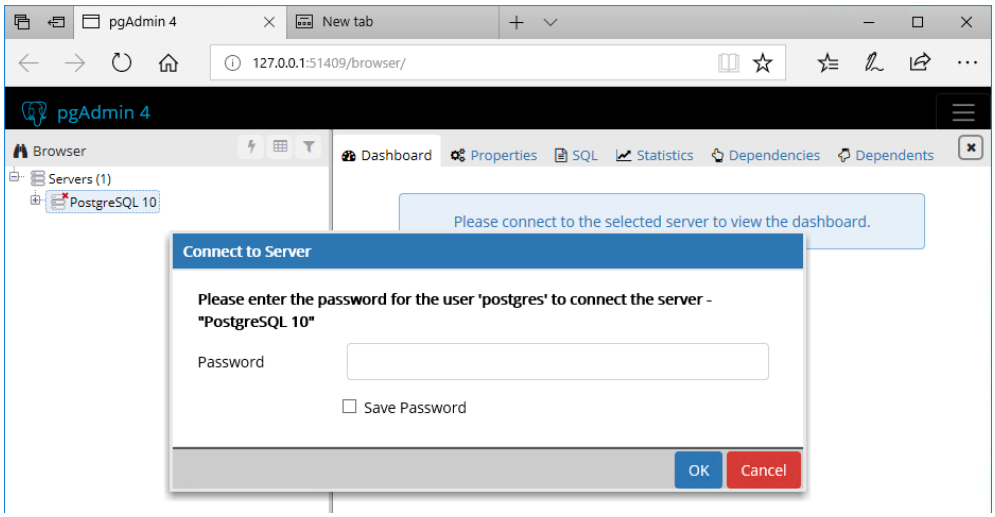
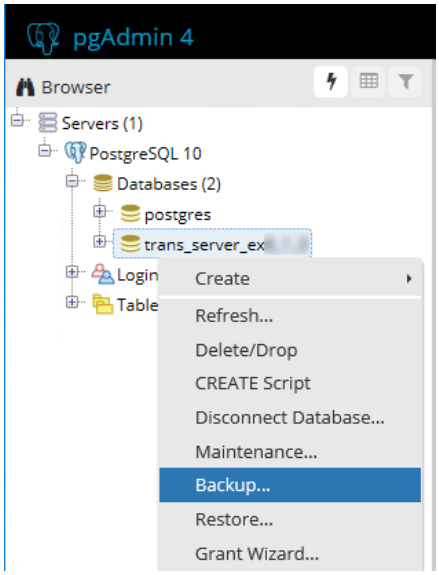
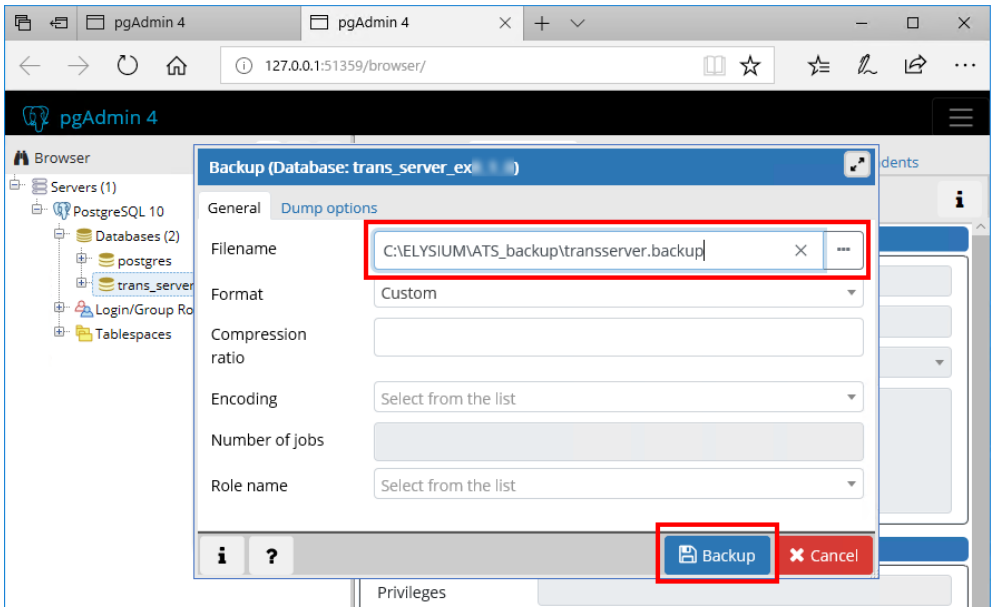


3. Select the database that you created and right-click on it, then select [Backup] to back up the database.



4. Click "..." to specify the backup file name and its location, then click [Backup].



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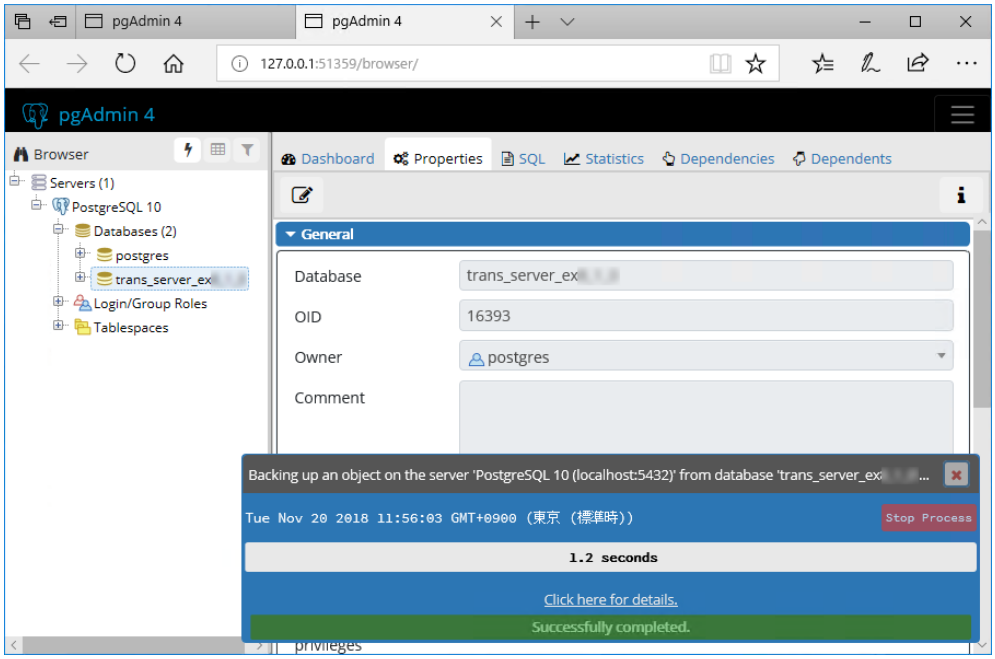
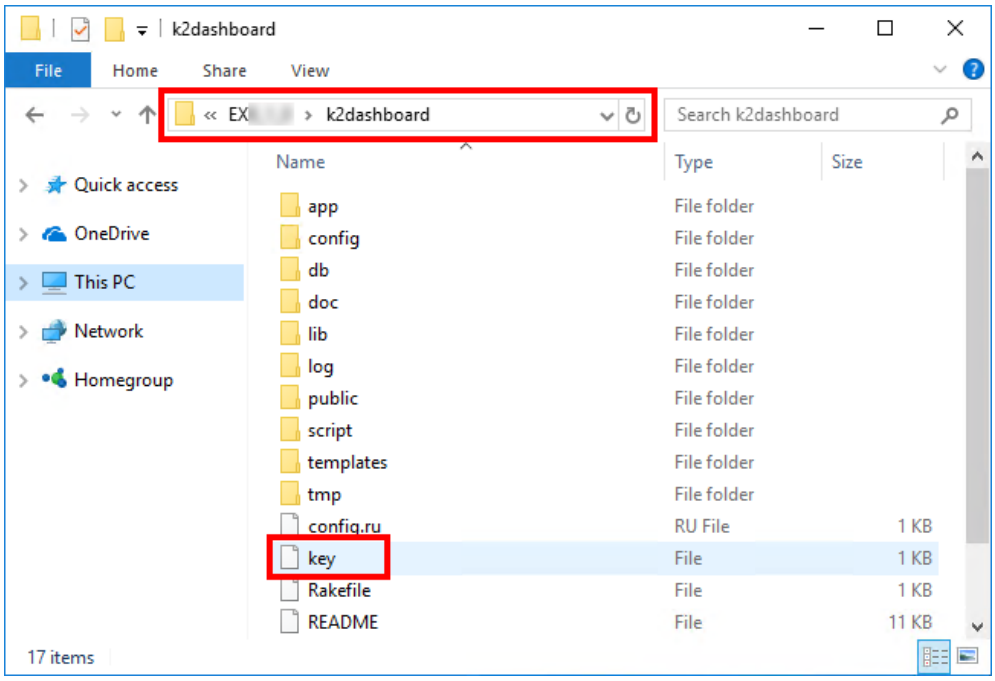
5. After finishing the database backup, please confirm "Successfully completed." is displayed and then click [X] at the right top of the dialog.



6. And also you have to copy and save the key file as below.
   Copy the key file located in <ASFALIS TransServer installation-path>\k2dashboard to another directory (such as desktop etc.).



7. Open the following configuration file (k2server.ini), and back up the folder specified with [K2server] > "PrivateResourcePath".
   <ASFALIS TransServer installation folder>\config\k2server.ini

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6.2. Restore the Database

6.2.1. How to Restore Environment Using Rake Command

This section explains how to restore the environment semi-automatically using rake command. Please ensure to create a backup file using auto-backup functionality prior to this. Please refer to [6, *Back up & Restore*] for the instruction.

1. Copy the backup file to the computer to restore to when restoring the environment to a different computer.
   (Skip this process when restoring to the same computer.)
2. Run <ASFALIS TransServer installation folder>\k2dashboard\start-console.bat.
3. Run the following rake command in the command prompt from step 2 above.

   - bundle exec rake ats:restore ATS_BACKUP_FOLDER=<Path to ASFALIS TransServer backup folder>

   Please specify ASFALIS TransServer backup folder by its absolute folder path.
   E.g.) \\path\to\ats_backup\20160705_023206_backup_d5c868f2

6.2.2. How to Restore Environment Manually

When you restore the database for ASFALIS TransServer, you need to be aware that

- You need to initialize current database to restore.
- The current database will disappear when you restore it.
- It requires to do the following procedure prior to the restoration when restoring the data to a computer which is different from the source computer.
  1. Copy the following folder in the source computer to the destination computer.
     - Folder specified at "[K2server] section > PrivateResourcePath" in the configuration file (k2server.ini) placed under the following path in the source computer <ASFALIS TransServer installation folder>\config\k2server.ini
  2. Edit the path specified at "[K2server] section > PrivateResourcePath" to the where you copied to at step 1. above.

How to restore the database

1. At first you need to initialize the destination database that you want to restore.
   i. Execute <installation-path>\k2dashboard\start-console.bat
   ii. Execute "bundle exec rake db:drop"
   iii. Execute "bundle exec rake db:create"

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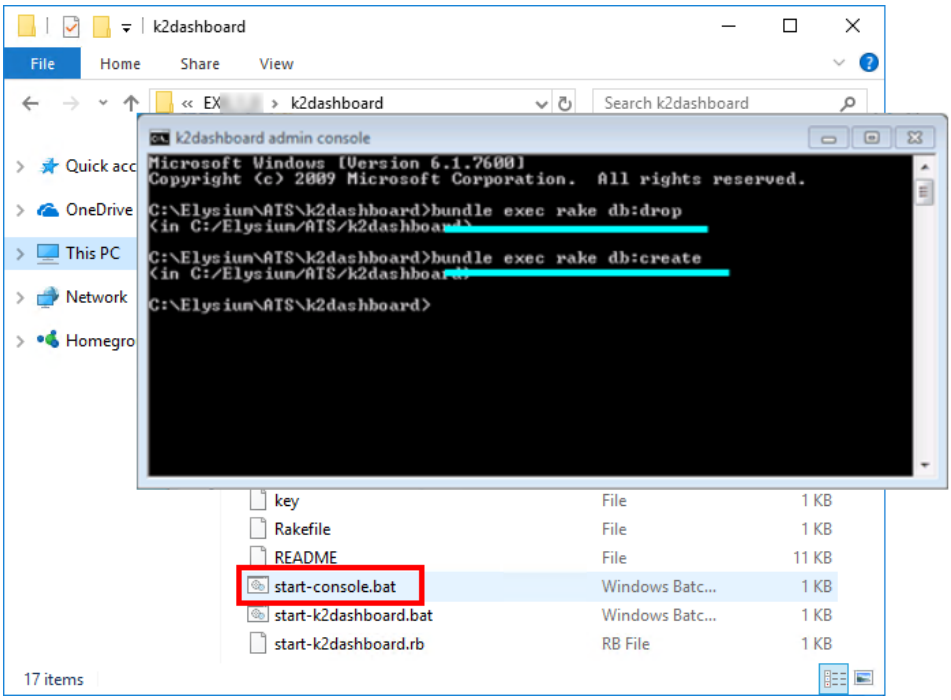
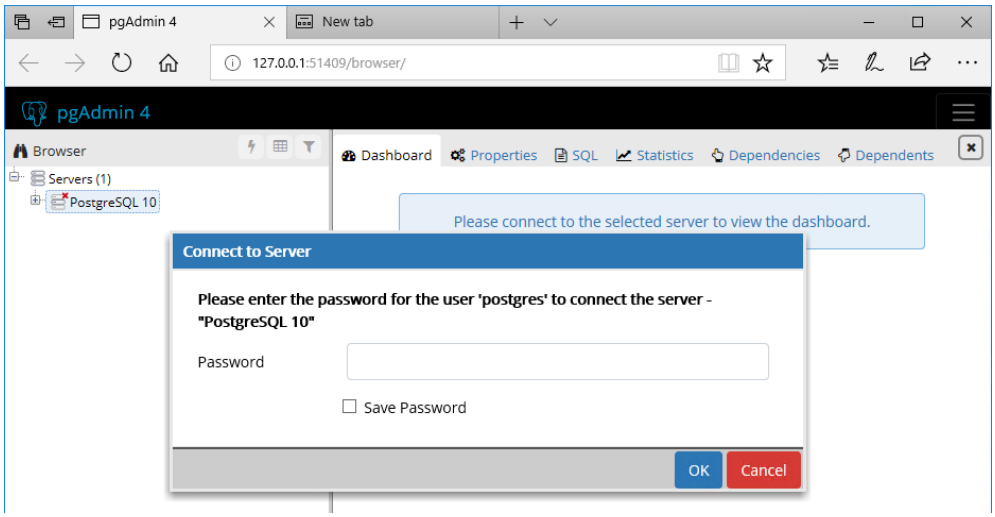


Note)
When you initialize a database, you need to shut down "pgAdmin". You will not be able to execute "db:drop" if it is working. And confirm that the database disappears when you execute "db:drop".

2. Launch the database: Select Windows [Start] > [PostgreSQL 10.*] > [pgAdmin 4].
3. Double-click "PostgreSQL 10.*" (localhost:5432, if it was installed by default settings) and type in the password to connect to server.



4. Select the database that you want to restore and right-click on it and select "Restore" from the context menu to restore it.

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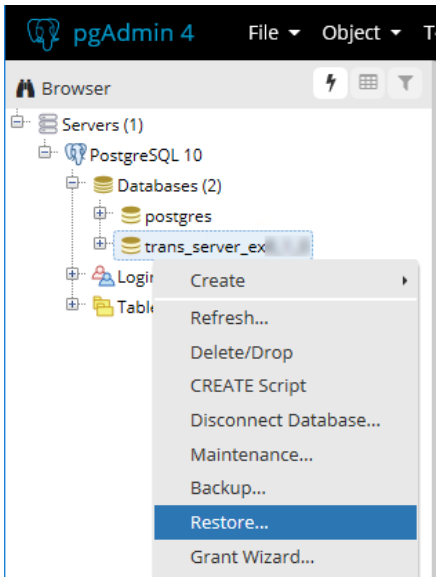
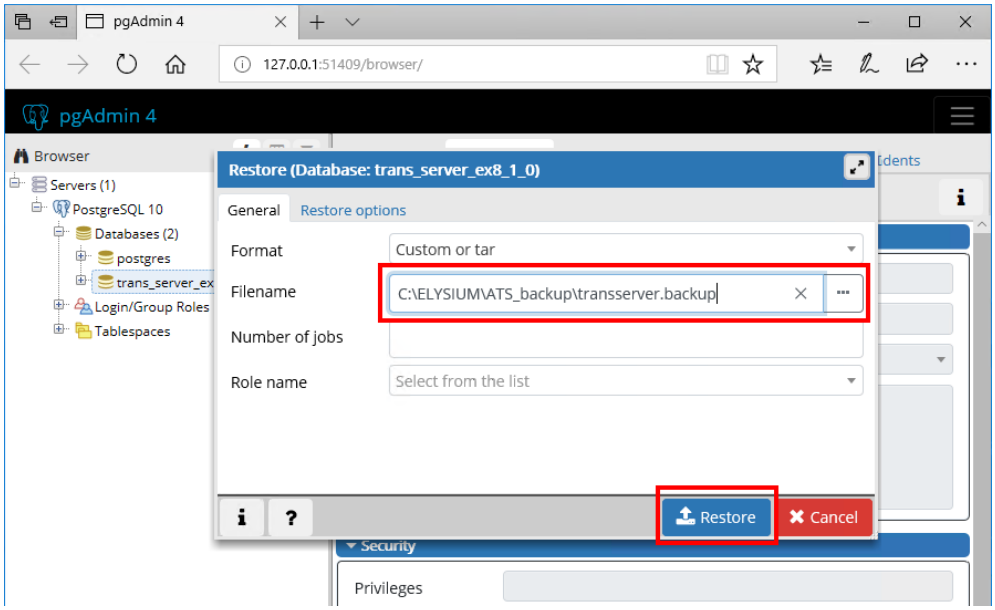


5. Click [...] to select a backup file that you have created before, then click [Restore].



6. Please confirm "Successfully completed." is displayed and then click [X] at the right top of the dialog to restore the database.

> Hint)
> You should cancel the database restoration when you get an error. And reconfirm the operation of step1 (initialization) has been completed or not.

7. Select the restored database and open "Vaults" table.
8. Overwrite the value in "path" column of two records whose value in "ats_version" column match the version of ASFALIS TransServer to restore.
   The following table shows values for "path" column when restoring ASFALIS TransServer EX8.1.0 which "PrivateResourcePath" is set to: C:\Elysium\ASFALIS_TransServer\resource as an example.

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Value in "is_protected" column	Overwrite the value in "path" column as
true	<Path set at "PrivateResourcePath">\<ATS version to restore>\protected E.g.) C:\Elysium\ASFALIS_TransServer\resource\EX8.1.0\protected
false	<Path set at "PrivateResourcePath">\<ATS version to restore>\unprotected E.g.) C:\Elysium\ASFALIS_TransServer\resource\EX8.1.0\unprotected

Please ensure to specify either the local drive path or UNC path as the "PrivateResourcePath". Avoid specifying a path which includes a network drive (For example, N:\transserver\resources) because ASFALIS TransServer may not run properly.

9. Relocate the key file under <ASFALIS TransServer installation-path>\k2dashboard that you copied before.

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7. Delete Old Files

Administrator can delete old files in the database automatically to increase free disk space.

7.1. In the Computer which is Installed ASFALIS TransServer

7.1.1. Target Files

The following files will be deleted.

- Input file
- Output file
- Text log file of each Component
- XML log file of each Component
- Output file of each Component

7.1.2. How to Set Up

Select the menu [Administration] > [Server Configurations] and configure the following items appropriately for your environment.

Configuration Name	Description
system.resource.clean_up_duration	Specify the period to delete old files by seconds. If you would like to specify the time to start deleting, leave this field blank and specify at "system.resource.clean_up_cron".
system.resource.clean_up_window_time	Specify the window time by seconds for old files to be completely deleted.
system.resource.limit_total_size	Specify the total size of kept files(Unit: byte). Files in this system will be deleted from the oldest when the total size exceeds this value.
system.resource.min_lifetime	Specify the minimum length of the time to keep files by seconds. Files registered within this time range will be kept even if the total size exceeds the value specified in "system.resource.limit_total_size configuration".
system.resource.clean_up_cron	Specify the time to start deleting old files in cron format. If you would like to specify the period, leave this field blank and specify at "system.resource.clean_up_duration".

Flowchart below describes how resource file deletion is processed in ASFALIS TransServer.

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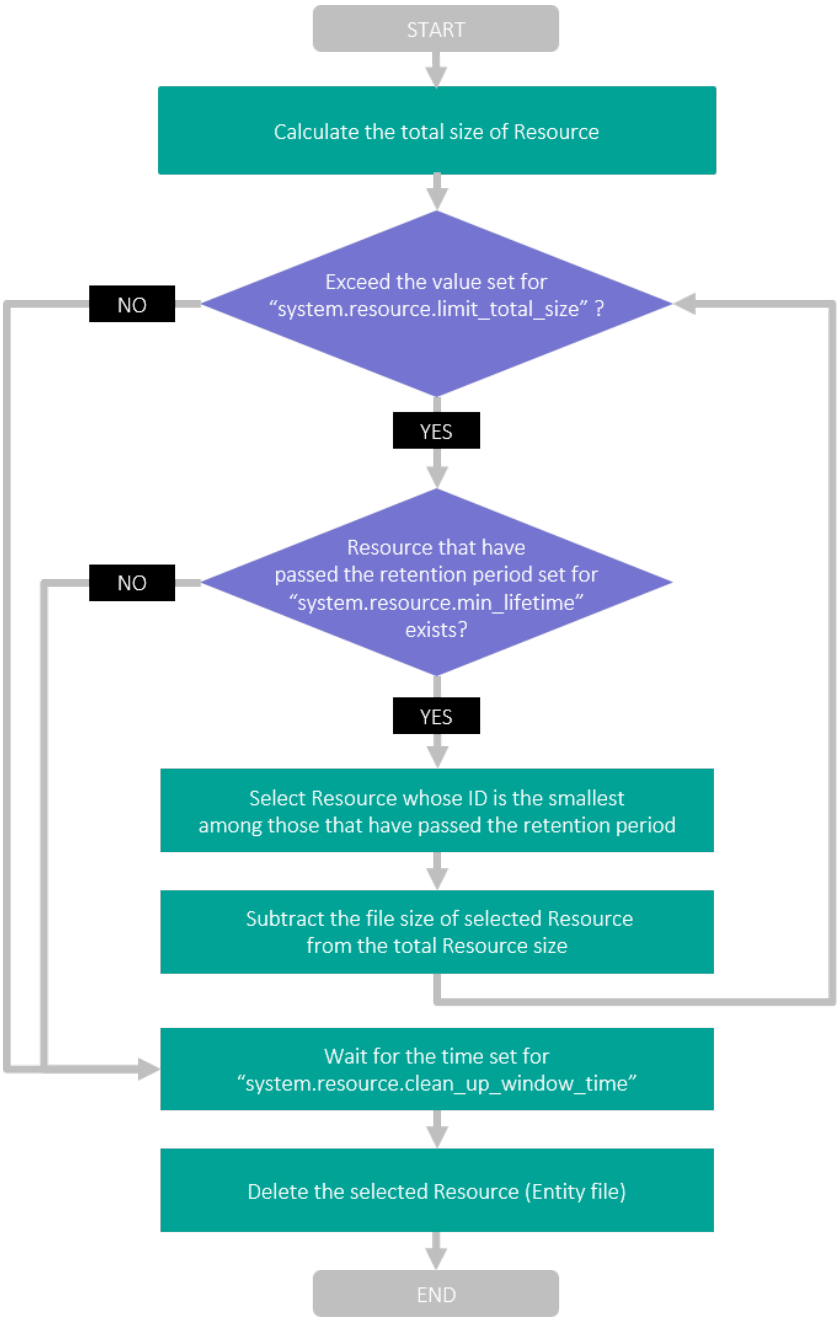
"Resource" in the flowchart refers to the files listed at "7.1.1, “Target Files”".



In case that the total size of kept files under this system exceeds the specified by "system.resource.limit_total_size", the files that exceeds the time specified by "system.resource.min_lifetime" after the file is created will be target to be deleted.
The target files will be deleted after the time specified by the value of "system.resource.clean_up_window_time."
Deleting files are performed at intervals of the time specified by "system.resource.clean_up_duration" or at the timing specified by "system.resource.clean_up_cron".

Hint)
Please refer to "Hint) cron format" of [6, *Back up & Restore*] for cron format.

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You can also run the cleanup from the command line as follows.
Run "<installation-path>\k2dashboard\start-console.bat" and run the following command in the opened command line interface to delete all files that satisfy either of the conditions mentioned above.

Command:

```
bundle exec rake ats:resources:cleanup
```

Furthermore, by using the JOB_ID_LIST option, you can delete only the files related to the specified Job ID. An example of the command is as follows:

```
bundle exec rake ats:resources:cleanup JOB_ID_LIST="1,2,3"
```

In this example, the files related to Job IDs 1, 2, and 3 are deleted.

When this option is used, the specified files are deleted even if the period specified by system.resource.clean_up_window_time has not elapsed.

7.2. In the Shared Directory

7.2.1. Target Files

Work folders in the shared directory will be deleted.

7.2.2. How to Set Up

Select the menu [Administration] > [Server Configurations] and configure the following items appropriately for your environment.

Configuration Name	Description
scheduler.common.on_error_keep_directory	Specify whether keeping work directories. If TRUE, work directories are always kept and downloadable from Job Detail window also when Job is successfully completed. Work directories of the completed Jobs are kept for the retention period set for "scheduler.common.succeeded_directory_clean_up_duration".
scheduler.common.keep_directory	Specify whether keeping work directories. If TRUE, work directories are always kept and downloadable from Job Detail window also when Job is successfully completed. Work directories of the completed Jobs are kept for the retention period set for "scheduler.common.succeeded_directory".

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Configuration Name	Description
scheduler.common.failed_directory _clean_up_duration	Specify the time interval (unit: second) to delete the work folders of uncompleted Jobs.
scheduler.common.succeeded_directory _clean_up_duration	Specify the time interval (unit: second) to delete the work folders of completed Jobs.

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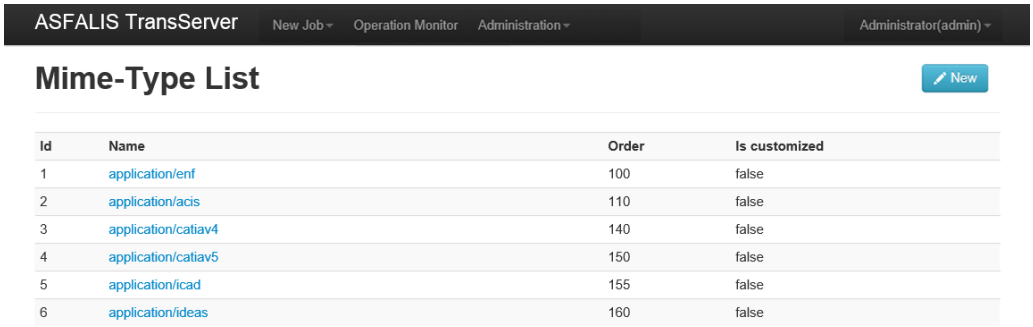
8. MIME Types and File Types

In ASFALIS TransServer, file types are managed as MIME Types per application such as CAD systems. This information is used to check that the relationship between inputs and outputs for each Component is correct. This function allows to create MIME types specifically for each Custom Component, and customize the relationships between MIME types and related file types.

8.1. Customizing MIME Types

Log in to ASFALIS TransServer as a User in "Administrator" group, and open <ASFALIS TransServer URL>/mime_types to view the list of MIME types.
Select any MIME type name to modify file type settings of existing MIME types.



Id	Name	Order	Is customized
1	application/enf	100	false
2	application/acis	110	false
3	application/catiav4	140	false
4	application/catiav5	150	false
5	application/icad	155	false
6	application/ideas	160	false

8.1.1. Creating New MIME Types

Click [New] button at the top right of "Mime-Type List" page to create new MIME types.Specify "Name" and "Order", and then click [Register] button. A new MIME type will be created and you will return to the list page.

8.1.2. Editing Existing MIME Types

Select any MIME type name in "MIME-Type List" page and to edit existing MIME types.

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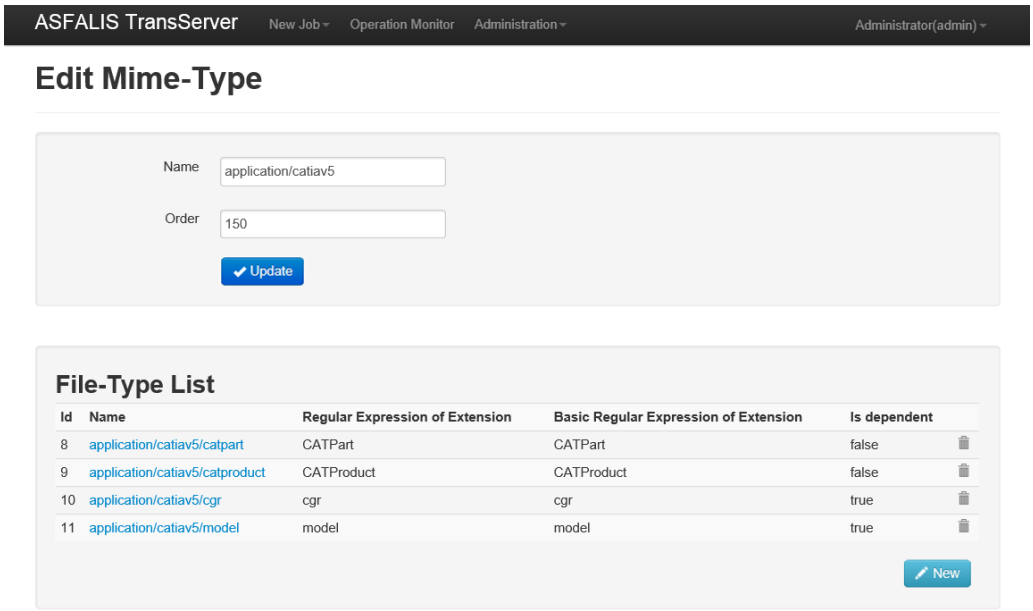

You can

- Change MIME type name
- Change the order
- View and delete available file types
- Add new file types and edit existing file types

in "Edit Mime-Type" page.

Please note that file types cannot be restored once deleted. Please add as a new file type again.

8.2. Customizing File Types

8.2.1. Adding New File Types

Click [New] button at the right bottom of "Edit Mime-Type" page to add new file types.

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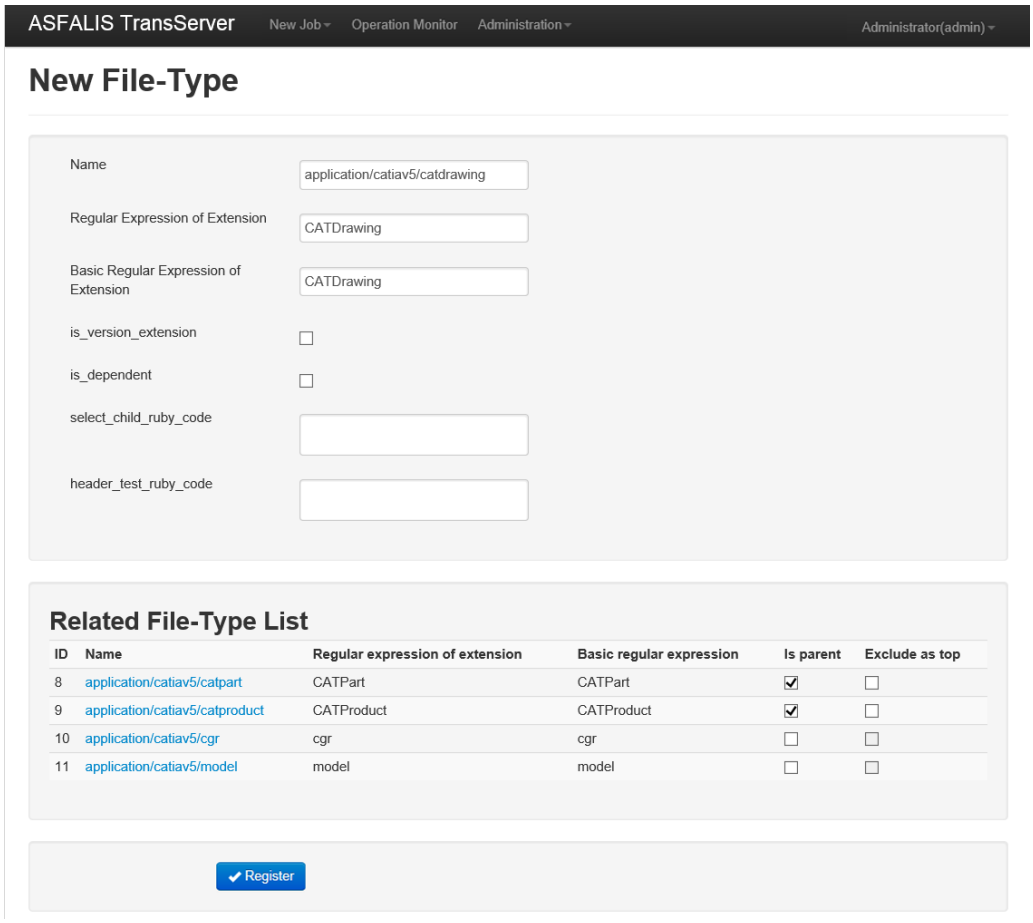

Set the following in "New File-Type" page;

- Name: Name of the file type
- Regular Expression of Extension: Regular expression of the file type
- Basic Regular Expression of Extension: Basic regular expression of the file type
- Is_version_extension: Check this option (set "TRUE") when the file extension has a numeral behind (e.g., *prt.1)
- Is_dependent: Check this option (set "TRUE") when this file type will never be a top assembly(*1)
  - Please ensure that "Is_dependent" is checked off (set "FALSE") for at least one of the file types available for each MIME type.

Also set the followings on the related file types which belong to the same MIME type;

- Is parent: Check this option (set "TRUE") when this file type can be a parent of the file type which you are creating now
- Exclude as top: Check this option (set "TRUE") when the file type which you are creating now will never be a top assembly when input parent file type together with this file type
  - This is available only when "Is parent" is checked (set "TRUE").

(*1): Please do not modify "select_child_ruby_code" and "header_test_ruby_code".

Please refer to [8.2.3, “Sample Cases”] for sample cases.

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8.2.2. Editing File Types

Click any file type name in "Edit Mime-Type" page to edit existing file types. Please refer to [8.2.1, “Adding New File Types”] for the description of each item.

8.2.3. Sample Cases

Below shows the instruction of how to create new file types (we call them as "A", "B" and "C" here) under a sample condition described below;

Condition

i. "A" can be a parent of "A", "B" and "C"

ii. "B" can be a part file on its own

iii. "C" is dependent to "A"

iv. "C" can never be a top assembly when inputs contain both "A" and "C"

How to create file types satisfying the conditions above

(Roman numerals in the brackets shows the related conditions.)

1. Create a new file type "A", and check off all the checkboxes.
2. Open created file type "A", and check "Is parent" for related file type "A". (i.)
3. Create a new file type "B". Check off "is_dependent" (ii.), and check "Is parent" for related file type "A". (i.)
4. Create a new file type "C". Check "is_dependent" (iii.), and check "Is parent" and "Exclude as top" for related file type "A". (i., iv.)

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9. Customizing Function

9.1. Overview

This section explains customizing functions, which is a part of ASFALIS TransServer administrative function.

Word Definition

- ASFALIS TransServer's external URL is defined as <ASFALIS TransServer Base URL>
  e.g.,) http://hostname:3000
- ASFALIS TransServer's installation directory is defined as <ASFALIS TransServer Install Directory>
  e.g.,) C:\ELYSIUM\transserver
- Directory of ASFALIS TransServer's configuration sample file is defined as <ASFALIS TransServer Sample Directory>.
  e.g.,) C:\ELYSIUM\transserver\k2dashboard\public\samples

9.2. Custom Component

Like standard ASFALIS Components, you can also use non-ASFALIS executables in ASFALIS TransServer by registering them as "Custom Components". Followings are mandatory procedures to use Custom Components in ASFALIS TransServer.

Slave Node side

- Place executable file to use as Custom Component on to Slave Node computers (This can be placed in a network folder.)
- Register executable file mentioned above to Slave Node by defining it in CMP file.

ASFALIS TransServer side

- Register Custom Component and its parameters to ASFALIS TransServer by registering JSON file to define such information.

Like standard ASFALIS Components, Custom Components and parameters become unamendable/undeletable once they are used in a Scenario. Therefore, please create new Custom Components/parameters, and disable unnecessary ones for your needs.

9.2.1. Registering Custom Components

Register a custom Component to the computer which hosts Slave Node. Place a CMP file named <Name of custom Component>.cmp under
<ASFALIS Component Install Directory >\data\custom\

You will find a sample CMP file under
<ASFALIS TransServer Sample Directory>\custom_component

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CMP file is a configuration file in .ini file format. Below are the descriptions for each sections in the file.

- **Section for Execution**
  Please note that you cannot modify the parameter name for this section.

Parameter Name	Description	Mandatory
Executable	Specify the path to the executable file.	YES
Argument_(Number)	Specify arguments which is passed to an executable file. Replace (Number) with a sequential number for each argument starting from zero. EX) Argument_0, Argument_1 etc.	Optional
Cancel	Specify "ON" to activate timeout and termination. A "STOP" signal will be sent to a process in progress in case of a termination or a timeout.	Optional
AsfalisModule	Specify the installation folder of ASFALIS module.	Optional, but mandatory when "Cancel" is "ON"

- **Section for Outputs**
  The file specified here will be regarded as the output file and become downloadable from ASFALIS TransServer. Please note that only the result files specified here become downloadable.
  You can edit the parameter name for this section as you like, but please ensure that it matches with the information in the CSV file registered to ASFALIS TransServer. Regarding (*2) "outputfile_filename" below, you can only edit "outputfile," and always need to put "_filename" at the end.

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Parameter Name	Description	Mandatory
outputfile (*1)	Specify the file path of the output file including the filename.	YES * Use (*1) or (*2) when you specify only one output file, and (*2) when you specify multiple output files.
outputfile_filename (*2)	Have custom component output a text file with the top assembly file name written on the first line, and other files name written on the second and subsequent lines one by one. Specify the file with a relative path from the work folder. Strings in the text are interpreted exactly as written as file paths. If there's a space at the end or double quotation marks included, the file path cannot be interpreted, causing an error where the file cannot be found.	
reportfile_filename	Specify this parameter to export report files. Please refer to [9.2.2, "Registering Parameters to ASFALIS TransServer"] for the details.	Optional
logfile	Specify the file path of the log file including the filename.	Optional

$(WORKSPACE) will be extracted to a work folder path on the Slave Node. ASFALIS TransServer creates a work folder with unique path every time Component gets executed. The folder can be used to place a temporary file besides being used to send and receive a result file.

{Variable name} will be extracted to corresponding parameter value. In case of an input file or file type parameter, it extracts to a file path. For other type of parameter, it becomes information to display lines of value.

You can use batch file (.bat file) for the executables. In that case, use "%~1" format to refer to the command line arguments in batch file. It may produce unnecessary double quotations to use "%1" format.

9.2.2. Registering Parameters to ASFALIS TransServer

To set parameters for Custom Components, prepare parameter files in JSON format, and register it to the database of ASFALIS TransServer.
When preparing JSON file, please ensure to;

- Set the encoding to UTF-8
- Write in the format that complies to RFC4627

You can name this JSON file for your preference.

Run <ASFALIS TransServer Install Directory>\k2dashboard\start-console.bat and execute the

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following command in the opened command line interface to register JSON file to ASFALIS TransServer database;

```
Command: bundle exec rake ats:components:import
ATS_COMPONENTS_IMPORT_FILE=C:\path\to\components.json
```

Please refer to [12.6.6, “Importing Custom Components”] for the details of file format along with a sample file.

9.2.3. Defining Slave Nodes for Custom Components

When you wish to use a certain Slave Node to run Custom Components on, please ensure to add object like below in JSON file to define Slave Nodes that are available for Custom Components. Then, like standard ASFALIS Components, those Slave Nodes become available when specifying the Slave Node to use with "SlaveNodeName" parameter at Scenario creation. Please note that "SlaveNodeLabel" parameter is not available for Custom Components.

Below is a sample specifying Slave Nodes by their computer name.

```
{
    "key_name": "SlaveNodeName",
    "name": {
        "en-US": "Slave Node Name",
        "ja-JP": "Slave Node 指定"
    },
    "description": {
        "en-US": "Specify the Slave Node to use by its computer name and port
number. Specify as "(machine_name):(port_number)"",
        "ja-JP": "コンポーネントを実行するSlave Nodeのマシン名とポート番号を指定
します。\"（マシン名）:（ポート番号）\"を入力。"
    },
    "value_type": "text"
}
```

9.2.4. Registering Result Report Files to ASFALIS TransServer

When Custom Components export report files that are viewable in HTML/XML browsers, you can make them viewable and downloadable in ASFALIS TransServer [Job Detail] page.

The report file should be registered "all-inclusive" file set including accompanying files for visualization etc. (hereafter "Report File Set") in the following procedure. Sample files are available in the following folder.

- <ATS Sample Directory>\custom_component_reportfile

1. Prepare CMP file

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Prepare CMP file according to [9.2.1, “Registering Custom Components”], and place it in a local folder of Slave Node computer. In the CMP file, specify the file to define Report File Sets to register to ASFALIS TransServer (hereafter "report_file.txt") by its file path.
Please refer to B for the details of "report_file.txt".

2. Configure Custom Components

   Configure the Custom Component to;

   - Output Report File Set defined in "report_file.txt" to the file path in ASFALIS TransServer work folder specified in "report_file.txt"
   - Output "report_file.txt" to the file path specified in CMP file with "reportfile_filename" parameter.

     You can change the parameter name "reportfile_filename" to any with "XXX_filename". Please ensure that the XXX before the underscore match the value for "key_name" in the object for the report in the JSON file. In "report_file.txt" file, specify the Report File Sets by the relative file path from ASFALIS TransServer work folder as;

   - First line: Root file
   - Second to Nth line (depending on the total number of accompanying files): Accompanying file(s)

     A sample "report_file.txt" file to define a Report File Set

     ```
     index.html
     sample.css
     sample.js
     images/A1.png
     images/A2.jpeg
     sub/sub.html
     ```

   *Please ensure that this file contains no blank lines, otherwise the report will not be visualized correctly.

3. Register Parameters to ASFALIS TransServer

   Register parameters for Custom Component to ASFALIS TransServer database using JSON file. Please refer to [9.2.2, “Registering Parameters to ASFALIS TransServer”] for how to register.
   In the JSON file, specify parameters for report generation in object in the following format.
   A sample JSON file "components.json" is available in the following folder.

   <ATS Sample Directory>\custom_component_reportfile

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```
{
    "key_name": "reportfile",
    "name": {
        "ja-JP": "レポートの名前をここに設定します",
        "en-US": "Replace this string with the name of the report"
    },
    "description": {
        "ja-JP": "レポートの説明をここに記載します",
        "en-US": "Replace this string with the description of the report "
    },
    "value_type": "markup_report",
    "mime_type": "application/octet-stream"
}
```

For the security reason, please ensure that all the strings input to Custom Component by Users are sanitized properly when they will be embedded into output report files, so that Custom Component escapes all the strings embedded into output report files and the Web browsers do not treat them as scripts.
Otherwise, malicious scripts could be embedded into a model, which will be executed when the report is opened in ASFALIS TransServer to access to the information inside ASFALIS TransServer etc. (XSS vulnerability)

9.2.5. Registering Information to ASFALIS TransServer

You can register any information written in JSON format to ASFALIS TransServer, which can be used as parameters for post Components by parameter expansion functionality described at [9.6, “Parameter Expansion”].
Register information in the following procedure. Sample files are available in the following folder. This sample is to configure a Custom Component to output ENF file as is, as well as write values to set for Component parameters into JSON file.

<ATS Sample Directory>\custom_component_properties

1. Configure Custom Components

   Configure the Custom Component to;

   - Output information to register to ASFALIS TransServer in JSON format

     Please ensure that the JSON file will be output to the WORK folder in the following format; Write the information to register to ASFALIS TransServer by the key name and the value separated by colon ":".
     E.g.)

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```
{
    " ProcessResult ": "WARNING: An error occurred while processing Custom
Component A."
}
```

You can use the value in JSON file in post Components by setting a Component parameter as follows. With the JSON file above, the value "WARNING: An error occurred while processing Custom Component A." is returned.
E.g.)

```
Process Result: #{component.custom_component1.properties["ProcessResult"]}
```

Please refer to [9.6, “Parameter Expansion”] for the details about parameter expansion.

2. Prepare CMP file

   Prepare CMP file according to [9.2.1, “Registering Custom Components”], and place it in the following folder on Slave Node computer.
   <ASFALIS Component installation folder>\data\custom

   Then, register the Custom Component specified in this CMP file to Slave Node (set to "Enabled Components" from [Setup node])], and restart the Slave Node to reflect the changes.

   In the CMP file, specify the followings by their file path;

   - Executable file to output the JSON file with a parameter "Executable"
   - Output JSON file with a parameter, e.g., "propertyfile"
     - This parameter key name can be anything as long as it matches the key name used in the JSON file (described at C below) to register to ASFALIS TransServer.

       E.g.) To output JSON file with the name "property.json" to Work folder

       ```
       propertyfile=$(WORKSPACE)\property.json
       ```

3. Register Parameters to ASFALIS TransServer

   Prepare a JSON file that includes the definition of Component parameters (JSON file output from Custom Component, described at A above) in the following format, and then register to ASFALIS TransServer database. Please refer to [9.2.2, “Registering Parameters to ASFALIS TransServer”] for how to register.
   Please ensure that the value for "key_name" in this JSON file matches that used in CMP file described at B above.

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Note: "..." are to be replaced by other sections and hashes.

```
...
    "log_parameters": [
...
        {
            "key_name": "propertyfile",
            "name": {
                "ja-JP": "出力属性ファイル",
                "en-US": "Output attribute file"
            },
            "description": {
                "ja-JP": "登録したい情報を格納したファイルです。",
                "en-US": "Output from Custom Component A, use as parameter for
Component B."
            },
            "value_type": "json",
        },
...
    ]
...
```

9.3. Default URL

URL for each page will be as follows.

Operation Monitor	<ASFALIS TransServer Base URL>/
Operation Detail	<ASFALIS TransServer Base URL>/job_lots/<Operation ID>
Job List	<ASFALIS TransServer Base URL>/jobs
Job Detail	<ASFALIS TransServer Base URL>/jobs/<JobID>

Note)
Please note that <Job ID> and <Operation ID> will be replaced with the actual Job IDs and Operation IDs which have been given by ASFALIS TransServer. You can check the Operation IDs from Operation Monitor page, Operation Detail page etc., and the Job IDs from Operation Details page and Job List page etc.

9.4. Changing Help File

You can change the Help file for administrators and Users by modifying the following server settings.

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- system.url.admin_tutorial: This is to specify the Help file for administrators
- system.url.user_tutorial: This is to specify the Help file for normal Users

9.5. Using SSL

You can change the protocol used for an external URL into HTTPS. Specify "ON" for "SSL" in "K2dashboard" section in .ini file (<ASFALIS TransServer Install Directory>\config\k2server.ini). You also need to place a Key file under <ASFALIS TransServer Install Directory>\Apache\(version)\Apache2 according to the settings in "k2server.ini" file.
The external URL will be changed to
https://(Server name):(Port number specified at SSLListenPort).
Once completed, restart ASFALIS TransServer.

9.6. Parameter Expansion

By adding specific character strings in the parameter used in a Component, ASFALIS TransServer can dynamically expand parameter values during the Job execution. This is ideal when you wish to include the filename of the translation result in the subject of the notification message of Job completion.

Write the parameters below between "#\{" and "}." Parameter names of each Component are listed on "Component List" page from [Administration] > [Component Administration]. You can also check from the Scenario registration/edit page.

Regarding datetime-related parameters, refer to [Datetime-related Parameters] in this section. You can specify a preferred format by a combination of necessary items.

Parameter Name	Description
component."Component Instance Name".param."Parameter other than IO"	Expands parameter value
component."Component Instance Name".param."IO Parameter"	Expands the name of input and output file
component."Component Instance Name".param."IO Parameter".strip_extension	Expands the one without the file extension of the Component input and output file name
component."Component Instance Name".status@"Locale Name"	Expands status of the Component in the specified locale
component."Component Instance Name".owner	Expands the name of the Slave Node on which the Component was executed

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Parameter Name	Description
component."Component Instance Name".properties.ExtendedErrors	Expands the extended error information which was output when running specified Component, in JSON format. Please refer to "4.17 Error" of "XML Log File manual" for the details of extended errors.
component."Component Instance Name".properties.ExtendedErrors["Auto-assigned serial number of extended error"]["errorType"]	Expands a piece of extended error information in JSON format. (Information specified by serial number of extended error) *"errorType" is fixed string
component."Component Instance Name".properties.ExtendedErrors.jsonpath(Query string in JSONPath format)	Expands a piece of extended error information in JSON format. (Information specified by query string in JSONPath format)
component."Component Instance Name".properties.ExtendedErrors.count	Expands the number of extended errors which was output when running specified Component
component."Component Instance Name".properties["rc"]	Expands the extended error information which was output when running specified Component
job.id	Expands Job ID
job.input_file_set	Expands Job input file name
job.input_file_set.strip_extension	Expands the one without an extension from Job input file name
job.input_file_sets	Expands filenames including the file extension of all Job input files separated by commas
job.input_file_sets.strip_extension	Expands filenames excluding the file extension of all Job input files separated by commas
job.input_file_sets[n]	Expands the filename excluding the file extension at index N of an array of Job input files NOTE) Job input 1 = job.input_file_sets[0]
job.input_file_sets[n].strip_extension	Expands the filename excluding the file extension at index N of an array of Job input files NOTE) Job input 1 = job.input_file_sets[0]
job.uploaded_filesize_sum	Expands sum of file sizes of Job input on uploaded.
job.extracted_filesize_sum	Expands sum of file sizes of Job input after extraction
job.unique_name	Expands Job ID name
job.description	Expands Job memo

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Parameter Name	Description
job.priority@"Locale Name"	Expands priority of the Job in the specified locale
job.is_nightly	Expands true if nightly flag is ON, false otherwise
job.is_erased	Expands true if the Job was disabled, false otherwise
job.login_name	Expands the login name of Job submission User
job.create_user.login_name	Expands the login name of Job submission User
job.create_user.display_name@"Locale Name"	Expands the display name of Job submission User in the specified locale
job.url_to_download_results	Expands the URL for downloading the Job result files by bulk.
job_lot.id	Expands operation ID
job_lot.unique_name	Expands operation ID name
job_lot.name	Expands operation name
job_lot.login_name	Expands login name of the User who created the operation
job_lot.create_user.login_name	Expands login name of the User who created the operation
job_lot.create_user.display_name@"Locale Name"	Expands display name of the User who created the operation in the specified locale
job_lot.property."Operation Attribute Key"	Expands operation attribute value
scenario.id	Expands Scenario ID
scenario.name@"Locale Name"	Expands name of the Scenario in the specified locale
scenario.unique_name	Expands Scenario ID name
serverconfig."Server Config Name"	Expands server setting value
job_queue.waiting_job_count	Expands Job count waiting in queue

- Component Instance Name: Specify the Component name (the name shown in Scenario editing or Job detail pages) to specify the Component in a Scenario.
  E.g.) parasolid2enf
- Operation Attribute Key: Specify the attribute key which was registered in the Operation Type management.

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- Locale Name: Specify "en-US", "ja-JP", "de-DE", and "zh-CN".
- IO Parameters: Please note that "output file" parameter is available only for Components that follow the Component which outputs files to use because output file(s) become available upon Component completion.
  Please also note that files will be copied to Work folder when specified with file type parameters.

For example, in the Scenario "[Custom Component] → [Mail Component]," the parameter expansion below can be written only for [Mail Component], and not available for [Custom Component].

+ #\{component.customcomponent.param.outputfile}

- Parameter expansion in "Run Child Job(s) with another Scenario" Component
  To expand data of the parent Job in child Jobs, please configure in the following format. You can use the same parameters as normal Jobs simply by replacing "job." by "job.parent_job." in the parameters listed above.

  ```
  #{job.parent_job....}
  ```

  - Case 1: To expand the parent Job ID in child Job

    ```
    #{job.parent_job.id}
    ```

  - Case 2: To expand CAD validation result from the parent Job in child Job

    ```
    #{job.parent_job.component.geomdiff.properties["rc"]}
    ```

- Parameters to specify the file server, e.g., a parameter to specify the copy-to directory (result_base_directory) for [Transfer to Windows File Server], expand the path to the specified directory connecting the specified file server and the directory. The value will be as follows depending on whether the copy-to directory is a root folder. Sample below is a case when the file server is set to "\\fileserver\address" which has a sub directory "selected\directory".

```
#{component.copy_to_cifs.param.result_base_directory}
: \\fileserver\address (When the root directory of the file server is specified as
the copy-to directory)
: \\fileserver\address\selected\directory\. (When a sub directory is specified as
the copy-to directory)
```

- Please ensure to remove double quotation marks (" ") when replacing "Component Instance Name", "Operation Attribute Key", "Locale Name", and "IO Parameters" by the actual values.

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Datetime-related Parameters

Regarding parameters related to datetime information of Component Instances, specify what you would like to expand in the following format.

component."Component Instance Name".<Timing identifier>(<Time Zone>).format(<Format >)
(*): Time zone and the format are optional.

Below are the lists of function and arguments along with some samples.

- <Timing identifier>
  Specify which information you wish to expand, when the Component Instance started or ended.

Option	Description
started_at	Expands the Component Instance start datetime.
ended_at	Expands the Component Instance end datetime.

- <Time zone>
  Specify the time zone to expand the Component Instance start/end datetime.

Option	Description
Not specified	Expands the datetime in UTC (Coordinated Universal Time). Expands in "%Y%m%d-%H%M%S" format when the format is not specified.
Place	Expands the datetime in the specified time zone. Expands in "%Y/%m/%d %H:%M:%S (Place name)" when the format is not specified.
localtime	Expands the datetime in the time zone where ASFALIS TransServer is running (where the Component Instance was executed). Expands in "%Y/%m/%d %H:%M:%S" format when the format is not specified.

- <Format>
  Specify the format to expand the Component Instance start/end datetime.

Option	Description
path	Expands the datetime in "%Y%m%d-%H%M%S" format.
pretty_print	Expands the datetime in "%Y/%m/%d %H:%M:%S" format.

E.g.) When nx2enf Component Instance started on Oct. 1, 2016 at 19:00:15 (JST), and finished on Oct. 1, 2016 at 20:00:30 (JST)

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```
component.nx2enf.started_at(localtime): 2016/10/01 19:00:15
component.nx2enf.started_at(localtime).format(path): 20161001-190015
component.nx2enf.ended_at: 20161001-110030
component.nx2enf.ended_at(Tokyo).format(pretty_print): 2016/10/01 20:00:30 (Tokyo)
```

Regarding parameters related to datetime information of Jobs, specify what you would like to expand in the following format.

job.<Timing identifier>(<Time Zone>).format(<Format >)
(*): Time zone and the format are optional.

Below are the lists of function and arguments along with some samples.

- <Timing identifier>
  Specify which information you wish to expand, when the Job was created, updated, started, or ended.

Option	Description
created_at	Expands the Job creation datetime.
updated_at	Expands the Job update datetime.
started_at	Expands the start datetime of the first component of the job.

- <Time zone>
  Specify the time zone to expand the Job start/end datetime.

Option	Description
Not specified	Expands the datetime in UTC (Coordinated Universal Time). Expands in "%Y%m%d-%H%M%S" format when the format is not specified.
Place	Expands the datetime in the specified time zone. Expands in "%Y/%m/%d %H:%M:%S (Place name)" when the format is not specified.
localtime	Expands the datetime in the time zone where ASFALIS TransServer is running (where the Component Instance was executed). Expands in "%Y/%m/%d %H:%M:%S" format when the format is not specified.

- <Format>
  Specify the format to expand the Job start/end datetime.

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Option	Description
path	Expands the datetime in "%Y%m%d-%H%M%S" format.
pretty_print	Expands the datetime in "%Y/%m/%d %H:%M:%S" format.

E.g.) When a Job was created on Oct. 31, 2016 at 21:00:45, updated on Oct. 31, 2016 at 21:05:10, and started on Oct. 31, 2016 at 21:15:00 (JST).

```
job.created_at(localtime): 2016/10/31 21:00:45
job.updated_at(localtime).format(path): 20161031-210510
job.started_at: 20161031-121500
```

Since these strings will be processed while the Job is being executed, the time of Job completion cannot be acquired. Please use the following parameter to acquire the time of completion of a specific component:

```
component.(component instance name).ended_at
```

9.7. Tuning ASFALIS TransServer

9.7.1. Overview

ASFALIS TransServer accommodates most of the cases/use under default settings. However, it may degrade the performance that large number of Users access ASFALIS TransServer at the same time or large number of Jobs/files are registered.
We will explain how to modify settings in order to improve these situations.

9.7.2. Tuning the Database Performance

ASFALIS TransServer uses PostgreSQL to manage its database. You can improve the performance of ASFALIS TransServer by changing the setting of PostgreSQL. This is effective for the high workload situation due to a large amount of the data.
Edit the configuration file of the PostgreSQL "postgresql.conf" as below. And then restart PostgreSQL service from [Control Panel] > [Services].
Example of service name: postgresql-x64-9.4 - PostgreSQL Server 9.4

File to Modify

postgresql.conf (the configuration file of PostgreSQL)

Recommended settings

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Item name	Default Value	Sample Value
shared_buffers	32MB	512MB
temp_buffers	8MB	80MB
work_mem	1MB	32MB
maintenance_work_mem	16MB	256MB
wal_buffers	64kB	512kB
effective_cache_size	128MB	1024MB
deadlock_timeout	1s	10s

Please refer to the document from PostgreSQL for the details.

9.7.3. Tuning Application Server Management Settings

You can also improve the performance of ASFALIS TransServer by adjusting the number of application servers to be running at the same time. This is effective when there are many simultaneous access to the ASFALIS TransServer which degrades the response performance. Edit <ASFALIS TransServer Install Directory>\config\k2server.ini to adjust the number of application servers. The value to edit is "BalancerMemberNum" in K2dashboard section, and the recommended value is around three times of the expected number of concurrent access. And then restart ASFALIS TransServer.

File to Modify

File : <ASFALIS TransServer Install Directory>\config\k2server.ini
The value for "BalancerMemberNum" in K2dashboard section

Recommended settings

Increase the number of Users who access to ASFALIS TransServer concurrently for about three times of the expected number of Users

Restart ASFALIS TransServer once completed.

9.7.4. Configuring Max Concurrent Connections to Database

You also need to adjust the maximum number of the concurrent connections to PostgreSQL in accordance with the number of application servers specified at "9.7.3, “Tuning Application Server Management Settings”" and the number of Slave Nodes for ASFALIS TransServer.

Please refer to "9.7.2, “Tuning the Database Performance”" for the instruction on how to modify.

File to Modify

File : postgresql.conf (the configuration file of PostgreSQL)

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The value for "max_connections" parameter

Recommended settings

Specify the greater value from the following two options as the maximum number of the concurrent connections to PostgreSQL.

- 100
- (10 x A) + (5 x B) + 50

A : the number of application servers to use at the same time (the default value is 3)
B : the number of Slave Nodes for ASFALIS TransServer

This is the minimum value, and you can also specify even larger value than above.

9.8. LDAP Authentication Cooperation

9.8.1. Overview

This section explains the cooperation with LDAP server for User authentication in ASFALIS TransServer. You can use LDAP server for the password verification when Users log in to ASFALIS TransServer. It requires the followings to use LDAP authentication cooperation;

- A proper LDAP server which accepts authentication delegation
- An extra User account which is authorized to query information on linked User accounts

9.8.2. Using LDAP Authentication Cooperation

In order to enable LDAP authentication cooperation for Users,

1. Specify "TRUE" for "web.login.sso_ldap.enabled" from [Server Configurations]
2. Check in the checkbox of "Enable LDAP Cooperation" in "Edit User" page, and update it. Please note that this checkbox will be displayed only when "web.login.sso_ldap.enabled" is set to "TRUE".

Below are the related server settings. Please refer to their descriptions in [2.4, “Server Configurations”] for the details.

- web.login.sso_ldap.enabled
- web.login.sso_ldap.search_account_name_type
- web.login.sso_ldap.connection_user_dn
- web.login.sso_ldap.connection_user_password
- web.login.sso_ldap.server_host
- web.login.sso_ldap.server_port
- web.login.sso_ldap.search_base_dn

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9.9. Parameter Extension

9.9.1. Overview

This is a function to customize how to specify values for Component parameters, e.g., set up easy-to-use user interface for "custom_parameters" parameter, and set up pull-down lists, radio buttons etc.
This is effective to prevent human errors in value input for text-type parameters.

9.9.2. How to Set Up

1. Select "Extension (*1)" at "How to specify value" section of each parameter, and then "Extension Settings" field will appear.
2. Enter the value in the following format in RFC4627 compliant JSON to set value options beforehand.

(*1): This will be treated as "specified later, when a job is registered" internally.

9.9.3. Format

Layer	Node Name	Description	Type	Mandatory
1	format	-	object	Yes
2	type	• multiple (or multi): Specify a group of parameters along with their values by parameter keys and value options. This is for parameters that can accommodate multiples parameters, e.g., "custom_parameters" parameter. • single: This is for any other parameters.	string	Yes
2	parameters	Specify all information to use in parameter extension for each parameter in array. This is effective only when the type is "multiple (or multi)".	array of object	*1
3	(parameter)	-	object	-
4	key	Specify a parameter by its key.	string	-

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Layer	Node Name	Description	Type	Mandatory
4	type	• select: Pull-down list • radio: Radio button • text: Text box	string	Yes
4	value	Specify the default value of the specified parameter to show in "New Job" page. • When the type is set to "select" or "radio": This value will be selected by default when it is defined with "options" below. Otherwise, or when this is not specified, the first value defined with "options" will be selected by default. • When the type is set to "text": This value will be shown in the text box by default.	string	-
4	options	Specify options for the specified parameter in array. This is effective only when the type is "select".	array of string	*3
5	(option)	Specify the value directly by a string when the value is on its own.	string or object	*3
6	value	Specify the value for each option.	string	*3

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Layer	Node Name	Description	Type	Mandatory
6	description	Specify the description of each option. • When the type is set to "select": The existing description will be used instead if that is a public option, otherwise, only the option display name will be shown when this is empty or not specified. • When the type is set to "radio": This value will be used even when it is empty. When it is a public option, the description will be overwritten by this value. The existing description will be used instead if that is a public option when this not specified.	string	-
2	parameters	Specify all information to use in parameter extension for the specified parameter in array. This is effective only when the type is "single".	object	*2
3	type	Please refer to "(parameter)" > "type" section above.	string	Yes
3	value	Please refer to "(parameter)" > "value" section above.	string	-
3	options	Please refer to "(parameter)" > "options" section above.	array of string	*3
4	(option)	Please refer to "(option)" section above.	string or object	*3
5	value	Please refer to "(option)" > "value" section above.	string	*3
5	description	Please refer to "(option)" > "description" section above.	string	-

*1: This is mandatory when the "type" is "multiple (or multi)".
*2: This is mandatory when the "type" is "single".
*3: This is mandatory when the "type" is "select" or "radio".

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9.9.4. Examples

- Sample 1
  Customize "ENF Editor" Component by setting up "custom_parameters" parameter as follows;
  - use_asmedit
    - Input type: Pull-down list
    - Default value: 0
    - Options: 0, 1
  - PartialAssemblyExtraction
    - Input type: Radio button
    - Default value: 1
    - Options: 0, 1
  - ExtractByRegularExpression
    - Input type: Pull-down list
    - Default value: 0
    - Options: 0, 1
      (The first value will be used as the default value because "value" is not specified.)
  - extraction_target
    - Input type: Text
    - Default value: \\path\to\extractlist.xml

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```
{
  "format": {
    "type": "multiple",
    "parameters": [
      {
        "key": "use_asmedit",
        "type": "select",
        "value": "0",
        "options": [
          "0",
          "1"
        ]
      },
      {
        "key": "PartialAssemblyExtraction",
        "type": "radio",
        "value": "1",
        "options": [
          "0",
          "1"
        ]
      },
      {
        "key": "ExtractByRegularExpression",
        "type": "select",
        "options": [
          "0",
          "1"
        ]
      },
      {
        "key": "extraction_target",
        "type": "text",
        "value": "\\\\path\\to\\extractlist.xml"
      }
    ]
  }
}
```

- Sample 2
  Customize "Transfer to Windows File Server" Component by setting up "allow_overwrite" parameter as follows;
  - Input type: Radio button
  - Default value: 3
  - Options:

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Value	Description	Notes
0	0: Prohibit overwriting, and don’t alert even when there is already a file under the same filename, either. (Description modified)	*1
1	1:	*2
2	2: Allow overwriting, and don’t alert even when there is already a file under the same filename, either.	*3
3	3: Allow overwriting, but alert when overwritten a file under the same name.	*3
4	4:	*4

*1: The description will be replaced by the value specified with "description".
*2: The description will be replaced by the value specified with "description" even when it is empty.
*3: The existing description will be used instead if that is a public option when this is not specified.
*4: Only the option display name will be shown when this is not specified, and not a public option.

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```
{
  "format": {
    "type": "single",
    "parameter": {
      "type": "radio",
      "value": "3",
      "options": [
        {
          "value": "0",
          "description": "Prohibit overwriting, and don't alert even when there is
already a file under the same filename, either. (Description modified)"
        },
        {
          "value": "1",
          "description": ""
        },
        {
          "value": "2"
        },
        "3",
        "4"
      ]
    }
  }
}
```

- Sample 3
  Customize "Transfer to Windows File Server" Component by setting up "allow_overwrite" parameter as follows;
  - Input type: Pull-down list
  - Default value: 3
  - Options:

Value	Description	Notes
0	0: Prohibit overwriting, and don’t alert even when there is already a file under the same filename, either. (Description modified)	*1
1	1: Prohibit overwriting, but alert when there is already a file under the same filename.	*2
2	2: Allow overwriting, and don’t alert even when there is already a file under the same filename, either.	*2

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Value	Description	Notes
3	3: Allow overwriting, but alert when overwritten a file under the same name.	*2
4	4	*3

*1: The description will be replaced by the value specified with "description".
*2: The existing description will be used instead if that is a public option when this is empty or not specified.
*3: Only the option display name will be shown when this is empty or not specified, and not a public option.

```
{
  "format": {
    "type": "single",
    "parameter": {
      "type": "select",
      "value": "3",
      "options": [
        {
          "value": "0",
          "description": "Prohibit overwriting, and don't alert even when there is
already a file under the same filename, either. (Description modified)"
        },
        {
          "value": "1",
          "description": ""
        },
        {
          "value": "2"
        },
        "3",
        "4"
      ]
    }
  }
}
```

9.9.5. Supported Parameter Types

Parameter extension is effective for parameters whose types are either of the followings. Restrictions and/or notes are listed below if any.

- number

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- text
- textarea
  - Please note that options will be displayed differently depending on the values specified with "type".
    - When set to "multiple (or multi)":
      Each parameter will be displayed as "key=value".
    - When set to "single":
      Specified or selected value will be displayed on its own.
- radiobutton
  - Please ensure to set up options within existing ones listed in "Component Parameter Settings" page > "Options for Parameter".
- boolean
  - Please ensure to set up options by "0 (zero)" and/or "1".
- bitflag
  - Specify a sum of corresponding option values to create a new option that covers several existing ones listed in "Component Parameter Settings" page > "Options for Parameter".
- combobox
  - Please ensure to set up options within existing ones listed in "Component Parameter Settings" page > "Options for Parameter".
- pulldown
  - Please ensure to set up options within existing ones listed in "Component Parameter Settings" page > "Options for Parameter".
- scenario
  - Please ensure to set up options using Scenario IDs.

9.10. Integrated Windows Authentication

By communicating with Active Directory, users who are currently logged in to Windows can log in to ASFALIS TransServer without explicit authentication. To use this function, Active Directory must be deployed in the target environment. Below is the flow of the authentication procedure.

1. A user attempts to log in to the client computer.
2. The client computer communicates with the domain controller to authenticate the user.
3. If the login is successful, the domain controller distributes ticket-granting ticket (TGT) to the client computer.
4. The user attempts to access ASFALIS TransServer from the client computer.
5. ASFALIS TransServer returns the authentication request.
6. The client computer presents TGT to the domain controller.

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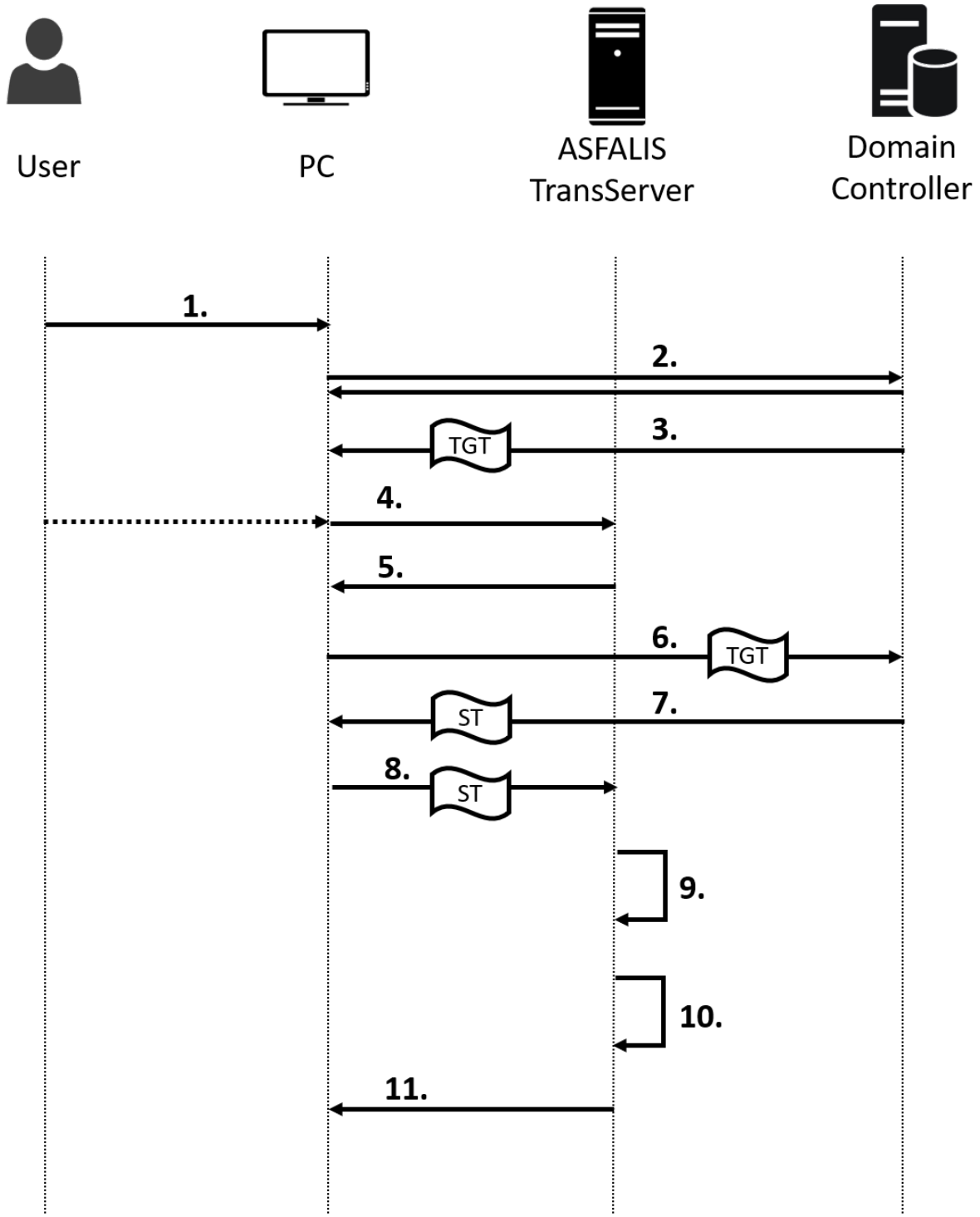
7. The domain controller confirms TGT validity and provides service ticket (ST) for ASFALIS TransServer to the client computer.
8. The client computer presents ST to ASFALIS TransServer.
9. ASFALIS TransServer confirms the validity of ST being presented.
10. ASFALIS TransServer obtains (or maps) the user registered in ASFALIS TransServer based on the username included in ST, and checks the validity of the mapped user.
11. ASFALIS TransServer responds to client computer with the post-login screen.



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Please refer to the below link for more details about TGT.

Ticket-Granting Tickets
https://docs.microsoft.com/ja-jp/windows/win32/secauthn/ticket-granting-tickets

ASFALIS TransServer also uses SPNEGO to implement Integrated Windows Authentication. Please refer to the below link for more details about SPNEGO.

SPNEGO Token Handshake by Using HTTP Headers
https://docs.microsoft.com/en-us/previous-versions/ms995330(v=msdn.10)#spnego-token-handshake-by-using-http-headers

To use the function, you need to configure the following:

- Active Directory
- ASFALIS TransServer
- The client computer

9.10.1. Setting Active Directory

Please ask your system administrator of Active Directory to perform this procedure.
The command examples described in the following sections are assumed to be set under the following conditions. When executing, please read accordingly to fit your target environment.

- Host name of the computer running ASFALIS TransServer: transserver
- Username of user created for identity federation: transserver-user
- User password created for identity federation: password
- Kerberos realm: AD.EXAMPLE.COM
- Service principal name: HTTP/transserver.ad.example.com

Creating User for Identity Federation

Create a new domain user to be used when ASFALIS TransServer communicates with Active Directory. Please note the following points:

- Disable "User must change password at next logon".
- Set a password which is complex and long as possible because the user does not log on interactively. It is also recommended to check "Password never expires" unless it violates the domain policy.

Creating Kerberos keytab file (Register Service Principal Name)

Follow the examples below to run ktpass command to create Kerberos keytab file, and distribute the created file to the system administrator of ASFALIS TransServer. Execute the

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command on a single line without a line break. By executing this command, the service principal name is registered in the domain along with the creation of a file.

```
ktpass -princ HTTP/transserver.ad.example.com@AD.EXAMPLE.COM -mapuser transserver-
user@AD.EXAMPLE.COM -pass password -crypto ALL -ptype KRB5_NT_PRINCIPAL -out
C:\temp\kerberos\transserver.keytab
```

Description of each argument is as follows:

- princ: Service principal name (Below is the type)

  ```
  HTTP/{Fully qualified domain name of the computer running ASFALIS
  TransServer}@{Kerberos realm}
  ```

- mapuser: Domain username that ASFALIS TransServer uses to communicate with Active Directory. (Specify the username of user created in 9.10.1.1, “Creating User for Identity Federation”)
- pass: Domain user password that ASFALIS TransServer uses to communicate with Active Directory. (Specify the password of user created in 9.10.1.1, “Creating User for Identity Federation”)
- crypto: Encrypt format of key stored in Kerberos keytab file (Specify "ALL")
- ptype: Type of principal (Specify "KRB5_NT_PRINCIPAL")
- out: Filename of Kerberos keytab file to be created and the path to which the file is output.

Please refer to the following URL for details about ktpass commands.

ktpass
https://docs.microsoft.com/ja-jp/windows-server/administration/windows-commands/ktpass

> Please note that you need to inform the administrator of ASFALIS TransServer with the following details after you have completed setting up everything.
>
> - Kerberos realm
> - Service principal name
> - Fully qualified domain name of the domain controller

9.10.2. Setting ASFALIS TransServer

Please ask your system administrator of ASFALIS TransServer to perform this procedure.

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Please note that the following procedure is written assuming that ASFALIS TransServer has already been installed. If ASFALIS TransServer is not installed yet, please do so before proceeding.

Creating Kerberos Configuration File

On a computer which ASFALIS TransServer runs, create a new file in C:\Windows named "krb5.ini". Content of the file is as follows:

```
[libdefaults]
       default_realm = AD.EXAMPLE.COM

# The following krb5.conf variables are only for MIT Kerberos.
       kdc_timesync = 1
       ccache_type = 4
       forwardable = true
       proxiable = true

# The following libdefaults parameters are only for Heimdal Kerberos.
       fcc-mit-ticketflags = true

[realms]
       AD.EXAMPLE.COM = {
               kdc = controller.ad.example.com
               admin_server = controller.ad.example.com
               default_domain = ad.example.com
       }

[domain_realm]
       .ad.example.com = AD.EXAMPLE.COM
       ad.example.com = AD.EXAMPLE.COM
```

Above is an example of configuration. Change the following parts to suit your environment.

- AD.EXAMPLE.COM: Kerberos realm
- controller.ad.example.com: Fully qualified domain name of the domain controller
- ad.example.com: Domain name

Placing keytab file

Place .keytab file distributed by your system administrator of Active Directory in the following path:

- <ATS Install Directory>\Apache\<Version>\Apache24\conf

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Creating User

Register the account of the user who is permitted to log in to ASFALIS TransServer using Integrated Windows Authentication in ASFALIS TransServer. Registration is performed from either the "User Management" menu or the user's import function.
Please refer to "Appendix" > "Import" > "Importing Users" in the "ASFALIS TransServer Manual for Administrator" for details about importing users. The import function is useful when registering a large number of users.
Define an optional mapping rule to specify which Active Directory user corresponds to the registered user. We recommend that you specify the same username as Active Directory user, unless specified otherwise.

Editing Configuration File

Edit the configuration file of ASFALIS TransServer. Below is the file to edit:

- <ATS Install Directory>\config\k2server.ini

Change the items related to Kerberos authentication included in k2server.ini as follows:

- Krb: Select "On".
- KrbAuthName: Specify the string to be displayed in the password dialog presented to the user. The password dialog will appear if you have allowed password authentication. If there aren't any problem with the content of the string, editing is not required.
- KrbAuthRealms: Set the realm of Kerberos.
- KrbServiceName: Set the service principal name of ASFALIS TransServer.
- Krb5Keytab: Specify .keytab file with a relative path from the following folder:
  <ATS Install Directory>\Apache\<Version>\Apache24
- KrbMethodK5Passwd: When allowing a non-domain-joined computer to authenticate by users in the domain, select "On"; otherwise, select "Off". When "Off" is selected, you cannot log in to ASFALIS TransServer from a non-domain-joined computer.

Please ensure to stop ASFALIS TransServer before you begin to edit.

Configuration example as follows:

```
Krb=On
KrbAuthName=TransServer authentication
KrbAuthRealms=AD.EXAMPLE.COM
KrbServiceName=HTTP/transserver.ad.example.com
Krb5Keytab=conf/transserver.keytab
KrbMethodK5Passwd=On
```

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Editing Database

Edit ASFALIS TransServer database as follows:

1. Start pgAdmin 4.
2. Select [PosgtreSQL 10] > [Databases] > [trans_server_ex_***] > [Schemas] > [public] > [Tables] > [server_configurations].
   (*** is the version of ASFALIS TransServer.)
3. Edit the following items in the table.
   - web.login.sso_reverse_proxy.enabled: Specify "TRUE".
   - web.login.sso_reverse_proxy.login_name_mapping: Write Ruby code that maps the domain username to the login name of the user registered in ASFALIS TransServer.

     The following is a configuration example for mapping {any username}@AD.EXAMPLE.COM to {any username}.

     ```
     { |req|
       orig_user_name = req['X-Forwarded-User'].downcase
       if orig_user_name =~ /(.+)@ad\.example\.com$/i
         $1
       end
     }
     ```
4. Start ASFALIS TransServer.

> Please note that this procedure prevents users who are not associated with the domain user from logging in to ASFALIS TransServer. If a problem occurs, change the value of "web.login.sso_reverse_proxy.enabled" back to "FALSE".

9.10.3. Setting Client Computer

Follow the below steps to configure the settings on the client computer (the computer that accesses ASFALIS TransServer).

1. On the client computer, start Internet Explorer.
2. Open [Internet options].
3. Open [Security] tab.
4. Select "Local intranet", then select [Sites].
5. In [Local intranet] window, select [Advanced].
6. In the field under "Require server verification (https:) for all sites in this zone", enter the below URL, and then click [Add].
   http://<Fully qualified domain name of the computer running ASFALIS TransServer >
   Example: http://transserver.ad.example.com

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7. Select [Close].
8. In [Local intranet] window, click [OK].
9. In [Internet options] window, click [OK].

This is the end of the procedure. Access ASFALIS TransServer from the client computer and confirm that the console of ASFALIS TransServer is displayed without displaying the authentication screen.
Furthermore, ASFALIS TransServer can be accessed using Chrome after setting the above configurations.

Please note that this configuration should be performed on all computers accessing ASFALIS TransServer.

If a browser is started and accessed on a computer running ASFALIS TransServer, authentication may not work properly. Please ensure to access from another computer. At this point, this is a limited matter for this product.

9.10.4. Troubleshooting

a. Internal Server Error is displayed
This error may occur if the URL specified when accessing ASFALIS TransServer does not match the format of the computer name used to register the service principal name. For example, in a situation where fully qualified domain name "transserver.ad.example.com" is used for the service principal name, specifying "http://transserver:3000/" or "http://192.168.20.20:3000/" as the accessed target URL will result in the internal server error. In this case, the correct URL is "http://transserver.ad.example.com:3000/". Please ensure to specify the URL using the computer name format included in the service principal name.
Service principal name registered in the domain can be confirmed by the following command.

```
setspn -L <Username of user created for identity federation>
```

In addition, when a browser is started and accessed on a computer running ASFALIS TransServer, "Internal Server Error" may appear.

b. Browser's authentication screen is displayed
If the browser's authentication screen is displayed when accessing ASFALIS TransServer, there are a few possibilities for the cause.
   - Non-domain-joined client computer.
   - User not logged on to the client computer with permission of the domain user.
   - 9.10.3, "Setting Client Computer" content not executed on the client computer.
   - Access to TransServer URL by a browser on a computer where ASFALIS TransServer is

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running.

c. Other problem besides the above occurring
When isolating the cause, you may find useful information from the Apache logs. Apache log is as follows:

- <ATS Install Directory>\log\Apache\k3_web.log.{YYYYDDMM}

If the above log contains the name of the domain user who accessed ASFALIS TransServer, there may be a problem with the contents set in "server_configurations" of ASFALIS TransServer. Please double-check the contents of the mapping set in "web.login.sso_reverse_proxy.login_name_mapping".
Also, if the above log does not contain the name of the domain user, ASFALIS TransServer cannot obtain information of the domain user. In this case, double-check the followings: the argument when running ktpass command, the placement state of .keytab file, the contents of "krb5.ini", and the contents of "k2server.ini" file.

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10. Use Cases

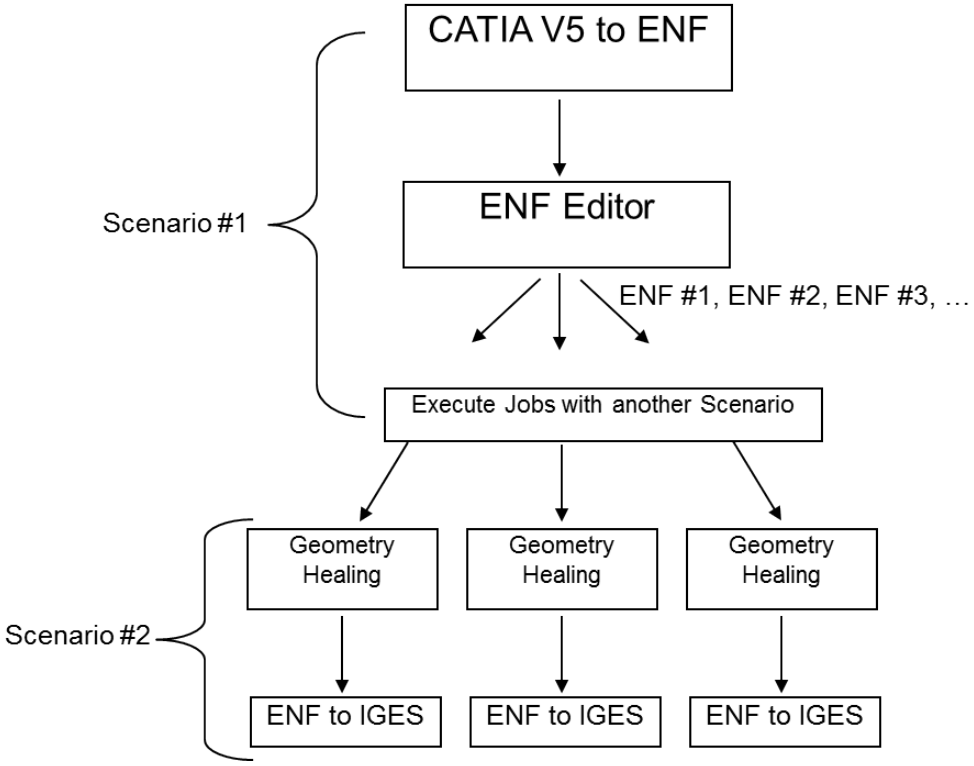
10.1. Run the Same Scenario to Multiple ENF files

You can create a Scenario that satisfies the following demands by using "ENF Editor" and "Run Child Job(s) with another Scenario" Components in combination;

- Output multiple ENF files by, e.g., extracting necessary parts only from the source model
- Run a same Scenario to those output ENF files

10.1.1. EX) CATIA V5 to IGES Translation

Below is an example.



Scenario #1 includes the following processes;

1. Output ENF file from "CATIA V5 to ENF" Component
2. Output multiple ENF files by extracting necessary parts only using "ENF Editor" Component
3. Run Scenario #2 ("Geometry Healing" and "ENF to IGES" Components) to each output ENF file from Scenario #1

Below is a sample settings for Scenario #1.

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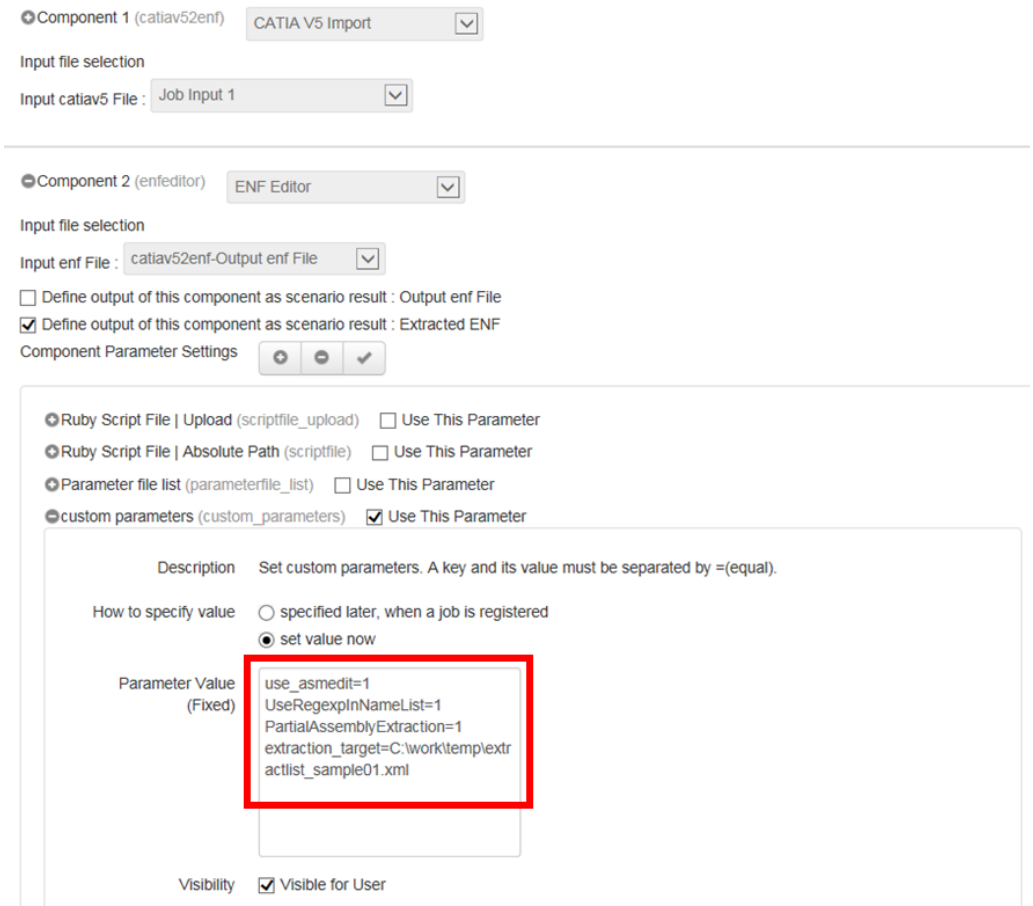

Set the following parameters for "ENF Editor" Component;

```
use_asmedit=1
ExtractByRegularExpression=1
PartialAssemblyExtraction=1
extraction_target=C:\work\temp\extractlist_sample01.xml (XML file to specify the
extraction targets)
```

Below is a sample XML file to specify the extraction targets.
EX) Extract parts named "sample01-1" and "sample01-2"

```
<?xml version="1.0" encoding="Shift_JIS" ?>
    <AssemblyExtractionList>
    <AssemblyExtractionRule type="name" keep_position="yes" >
        <Part name="sample01-1" />
    </AssemblyExtractionRule>
    <AssemblyExtractionRule type="name" keep_position="yes" >
        <Part name="sample01-2" />
    </AssemblyExtractionRule>
</AssemblyExtractionList>
```

Below is a sample settings for Scenario #2.

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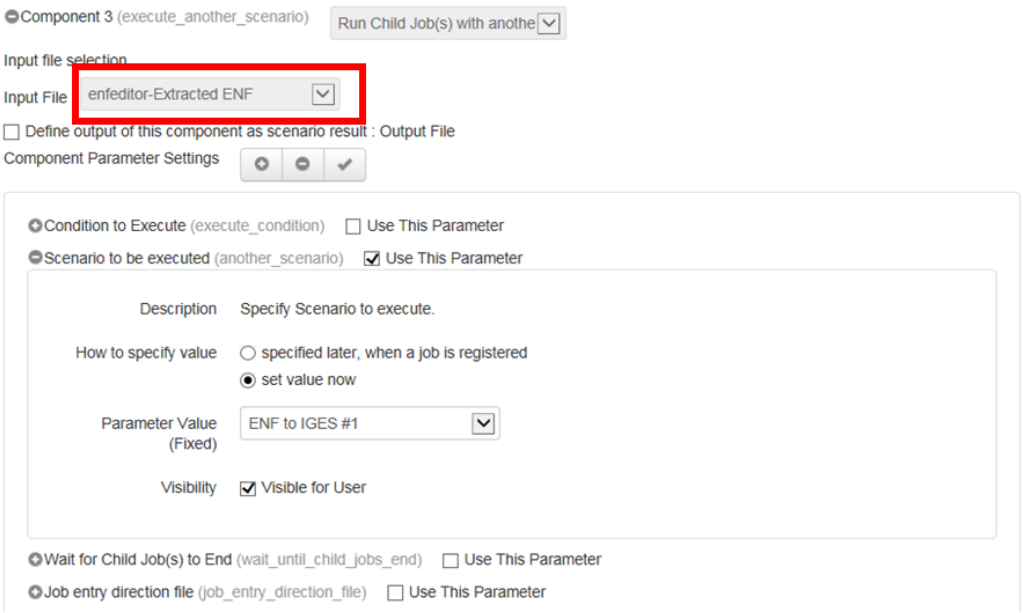
- Please specify "enfeditor-Extracted ENF" as the input for "Run Child Job(s) with another Scenario" Component.
- Please ensure to set fixed values with "set value now" option for parameters of Scenarios that will be used for child Jobs.



Once a Job using Scenario #1 and Scenario #2 is submitted, you can check the status and the result files from "Job Detail" page.
The sample image below shows that "ENF Editor" Component outputs two ENF files, and "Run Child Job(s) with another Scenario" Component runs "ENF to IGES #1" Scenario to each output ENF.

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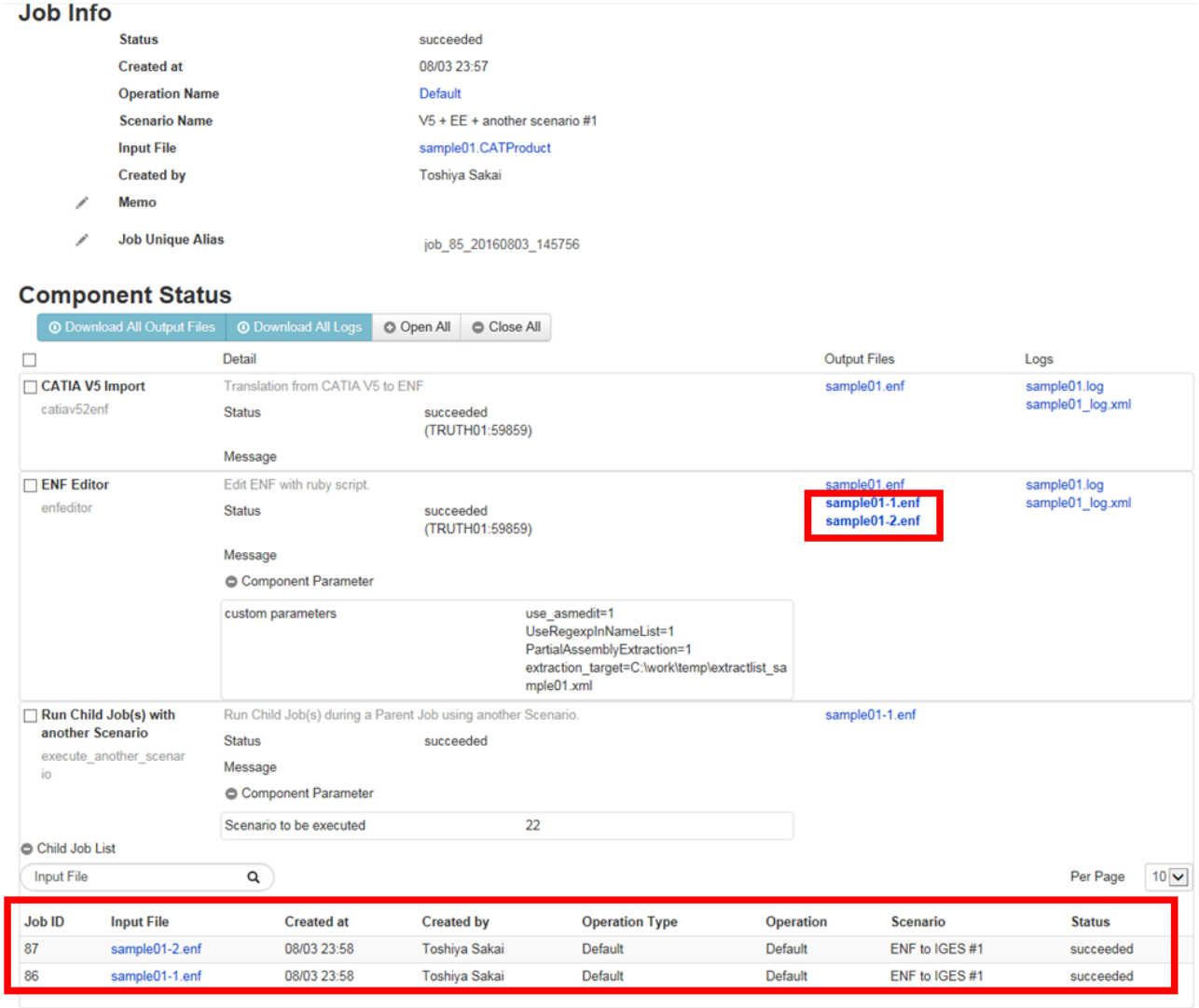

10.2. Use the Result of Custom Component in Post Components

You can use the result of Custom Components as the parameter for the post Components. Below are some sample cases.

10.2.1. Send Notification Messages on Component Result Status

You can set to receive email notifications on the result status of Custom Components. Configure the Custom Component to output the result status with pre-defined string, and use that string in "Mail" Component as follows.

1. Configure a Custom Component to output the Component result status in JSON file.
   The following strings will be included in the body of notification messages appropriately depending on the result status.
   - In the event of success in processing Custom Component A:

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```
{
    "processResult": "INFORMATION: Successfully completed processing Custom
Component A."
}
```

- In the event of failure in processing Custom Component A:

```
{
    "processResult": "WARNING: An error occurred while processing Custom
Component A."
}
```

2. Configure the Custom Component to register output JSON file to ASFALIS TransServer by following the instruction at [9.2.5, “Registering Information to ASFALIS TransServer”].
3. Specify "processResult" as the value for "Mail" Component parameter "Body" as follows. Please replace "custom_component1" by the name of Custom Component which outputs the result status following the instruction at "9.6, “Parameter Expansion”".

```
Process Result: #{component.custom_component1.properties["processResult"]}
```

10.2.2. Conditional Branch: Control the Scenario Flow by Number of Errors

You can set to run a different Scenario when the output result file contains more errors than the specified threshold. Configure the Custom Component to output the number of errors of its process, and use that value to judge whether to run a Job with another Scenario using "Run Child Job(s) with another Scenario" Component.

1. Configure a Custom Component to output the number of detected errors in JSON file like below.

   E.g.)

```
{
    "errorCount": 5
}
```

2. Configure the Custom Component to register output JSON file to ASFALIS TransServer following the instruction at [9.2.5, “Registering Information to ASFALIS TransServer”].
3. Set Component parameter "execute_condition" to define the condition to run "Run Child Job (s) with another Scenario" Component as follows. Please replace "custom_component2" by

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the name of Custom Component which outputs the result status following the instruction at [9.6, “Parameter Expansion”].

```
execute_if #{component.custom_component2.properties["errorCount"]} > 0
```

Post Components will be processed appropriately depending whether the given value satisfies the condition defined with "execute_condition".

- When no errors are detected (condition: execute_if 0 > 0);
  "Run Child Job(s) with another Scenario" Component will be skipped.
- When 3 errors are detected (condition: execute_if 3 > 0);
  "Run Child Job(s) with another Scenario" Component will be processed.

10.3. Flow Control by Component Result

You can use the result of Components as the parameter for "Run Child Job(s) with another Scenario"/"Stop" Component to control the process flow;

- Whether to run other Scenarios
- Whether to stop that Component

Set Component parameter "execute_condition" for "Run Child Job(s) with another Scenario"/"Stop" Component as follows.
(Please replace "Operator symbol" by mathematical symbols such as "==" or "!=".)

```
execute_if #{component."Component name".properties["rc"]} "Operator symbol" "Error
code"
```

Below are some sample cases.

- Run when "Validation" Component ends with error (Error code "1202")

  ```
  execute_if #{component.geomdiff.properties["rc"]} == 1202
  ```

- Run when "NX Export" Component is completed successfully (Error code "0")

  ```
  execute_if #{component.enf2nx.properties["rc"]} == 0
  ```

- Run when "NX Export" Component ends with error (Error code other than "0")

  ```
  execute_if #{component.enf2nx.properties["rc"]} != 0
  ```

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Please note that it will require additional settings on Slave Node side to use extended errors with error code "1000" or greater. Please set as follows.

Error Code	Parameter to Set
1001	*Either of the follows; EXTEND_ERROR_INFO 1 EXTEND_ERROR_INFO 2
1002	*Either of the follows; EXTEND_ERROR_INFO 1 EXTEND_ERROR_INFO 2
1003	*Either of the follows; EXTEND_ERROR_INFO 1 EXTEND_ERROR_INFO 2
1011	EXTEND_ERROR_INFO 2
1012	EXTEND_ERROR_INFO 2
1021	EXTEND_ERROR_INFO 2
1202	EXTEND_ERROR_INFO 2

Please set Component parameter "OptionalReturnCode=2" for "Check Geometry" Component to use error code "1201".

10.4. Use the Result of ENF Editor in Post Components

You can use various values/information output from "ENF Editor" Component for the post Components.
Configure "ENF Editor" Component to register certain information to ASFALIS TransServer by including the following processes in the script file. Sample script is available below.

- Create a hash that contains values/information to use in the post Component
- Output the created hash in JSON file to WORK folder
- Specify the absolute file path to the output JSON file with "propertyfile" key

With the following script, "property.json" output from "ENF Editor" Component will be registered to ASFALIS TransServer, which can be used in post Components.

Sample script

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```
require "rubygems"
 require "enfeditor"

 require "json"

 class MyEnfEditor
   def initialize
   end

   def execute(argv)
     EnfEditor::EESession.open(argv) do |session|
       input_enf = session.parameter['inputfile']
       output_enf = session.parameter['outputfile']
       session.read_enf(input_enf)

       # Create a hash
       exported_hash = {
         "Property1" => 1,
         "Property2" => {
           "Property2-1" => "2-1"
         }
       }

       # Export hash in JSON file
       json_path = "property.json"
       File.open(json_path, "w") do |f|
         f.write JSON.generate(exported_hash)
       end

       # Specify absolute file path to JSON file with "propertyfile" key
       session.xmllog.log_additional_output_filename(File.expand_path(json_path),
'propertyfile')
       session.write_enf(output_enf)
     end
   end
 end

 z = MyEnfEditor.new
 z.execute(ARGV)
```

Below are examples of using values output from "ENF Editor" Component.

- Case 1: Use the value for "Property 1" (Returns "1" with the sample script above)

```
#{component.enfeditor.properties["Property1"]}
```

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- Case 2: Use the value for "Property2-1" in "Property2" (Returns "2-1" with the sample script above)

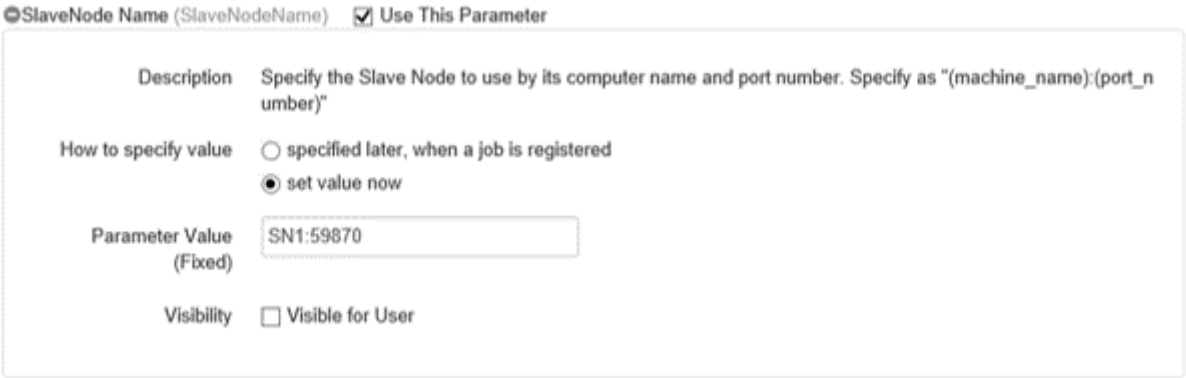
```
#{component.enfeditor.properties["Property2"]["Property2-1"]}
```

10.5. Run Components on Specific Slave Node

You can run Components on a specific Slave Node. This is useful when you wish to use appropriate Slave Node for each purpose, e.g., use different Slave Nodes for each Scenario. Specify the Slave Node to use by either of the followings;

- Slave Node name and its port number separated by a colon ":" with "SlaveNodeName"
  To run Component on the specified Slave Node.
- Slave Node label with "SlaveNodeLabel"
  To run Component on a Slave Node which has the specified label.
  Slave Nodes that have the same label are treated as a group, and Component will be processed on one of the Slave Nodes in the specified group.

1. Select [Administration] > [Component Administration] from the menu bar.
2. Select a Component to specify Slave Node to use in the list.
3. Check either or both "SlaveNodeName" and "SlaveNodeLavel" in "Other Parameters" list.
   Do the same for all Components you wish to use a specific Slave Node.
4. Select [Administration] > [Scenario Administration] from the menu bar.
5. Edit an existing Scenario or create a new one.
6. Specify the Slave Node to use either by its name and port with "SlaveNodeName" or by its label with "SlaveNodeLabel" per Component.



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11. Troubleshooting

Here are some possible causes and tips for common errors in ASFALIS TransServer.

11.1. When the Login Page is not Displayed

1. ASFALIS TransServer runs normally but there is a deficiency in the Firewall settings.
   - The setting of Firewall might be affecting in case that you can connect to ASFALIS TransServer from the server machine but cannot from the other machines. Please check the setting of Firewall.
2. ASFALIS TransServer fails to start properly.
   This is maybe because the specified port number is used by another application.
   - Please change the port number specified in the following configuration file to use other port numbers.
     <Installation folder ASFALIS TransServer>\config\k2server.ini

     Below is a list of port numbers which ASFALIS TransServer uses by default.

Process	Port number (Default)	Where to specify in the configuration file
Apache (Reverse proxy)	3000	[K2server] section > "ListenPort"
Nginx (Load balancer, ZIP compression)	4002	[Nginx] section > "ListenPort"
Rails (Application server)	30000 30001 30002	[K2dashboard] section > "BalancerMemberStartPort" (This defines the port number to start with, and uses the number of ports specified with "BalancerMemberNum" serially.)
KLoggr (Log record)	3006	[Kloggr] section > "ListenPort"
K2server (Statistics record)	50000	[K2server] section > "BalancerMemberStartPort"
MasterController (Scheduler process monitor)	3011	[K2scheduler] section > "MasterControllerPort" (*)

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Process	Port number (Default)	Where to specify in the configuration file
QueueController (Job queue management)	3012	[K2scheduler] section > "QueueControllerPort" (*)
MiscWorker (Backup etc.)	3013	[K2scheduler] section > "MiscWorkerPort" (*)
ScriptComponentWorker (Run scripts)	3100 3101	[K2scheduler] section > "ScriptComponentWorkerPortStart" (*) (This defines the port number to start with, and uses the number of ports specified with "ScriptComponentWorkerNum" serially.)
PerSlavenodeWorker (Communication with Slave Nodes)	3200, ...	[K2scheduler] section > "PerSlavenodeWorkerPortStart" (*) (This defines the port number to start with, and uses a port per Slave Node)

(*): [K2scheduler] section does not exist at the initial state, and the default ports are used by default. Add this section to customize the ports to use for your needs.

The following chart describes the relationship between processes listed above. All processes listed below "MasterController" runs within ATS Scheduler.

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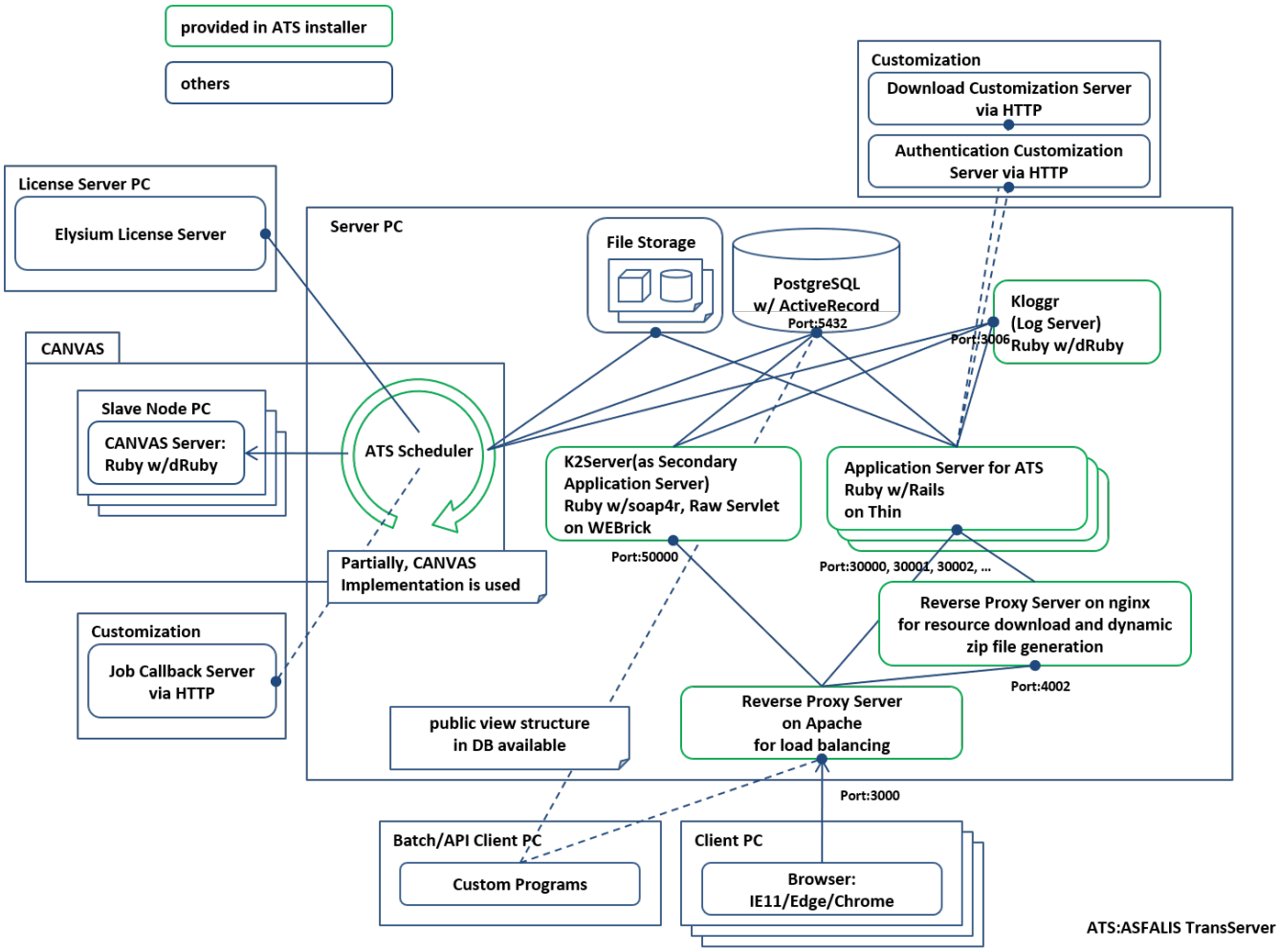

11.2. When an Error Occurs where ASFALIS TransServer Cannot Find the File

This is due to invalid cache of files in shared network folders. This may occur when using SMB (protocol via which Windows systems share files) version 2. (It may not occur even when using SMB version 2, and even in the environment where this error has occurred, it does not occur every time, which does not mean that the issue is solved.)
To solve this issue, please use the computers with OS that supports SMB version 3 for all the following;

- File server computer
- Computer which ASFALIS TransServer is installed to
- Computer which Slave Node(s) are installed to

11.3. When Failing to Login to ASFALIS TransServer

1. Account information which you have entered might be invalid.
    - You fail to log in when the login name and the password do not match each other. Please confirm that your login name and password are correct and try again.

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2. You are already logged in.
   - In the default setting, it is not allowed for a single User to proceed multiple sessions. Login will fail when you or someone else are logged in under that User account from another machine. If so, please try again after logging out from that machine.
   - You can change the setting to allow multiple sessions for a single User (account) at the "Server Configurations". Please find the setting below.

     ```
     web.login.enable_multiple_login
     ```

     Multiple sessions will be allowed when "TRUE" is set. You need to input "TRUE" to enable multiple Users from different client hosts to operate under the same account at the same time. The maximum number of the simultaneous sessions depends on the number of clients defined in the license for ASFALIS TransServer.
3. The number of sessions are exceeding the upper limit of the allowance on simultaneous sessions.
   - The number of simultaneous logins depends on the number of licenses you purchased. When the corresponding error message is displayed, please try re-login after other Users have logged out.
4. Login is disabled.
   - Login function is deactivated for that User account if the message "Account is not valid." appears. To enable login, please check the box "Enables user to login" in "Edit User" page.
5. Key file has been deleted.
   - Please pay an extra attention on not to delete the key file which will be created in the file below.
     <Installation folder ASFALIS TransServer>\k2dashboard\key
     In case the key file has been deleted, you cannot login to ASFALIS TransServer by the registered password.
6. Time on the server machine differs from the one on the client machine.
   - Login failure could be caused when the time on the server machine differs from the one on the client machine. Please confirm that they are matching.

11.4. When Failing to Restart ASFALIS TransServer Service from Task Manager

When restarting ASFALIS TransServer service from the [Service] tab of Task Manager, because the service takes awhile to stop, the service status may not switch from "Stop" to "Running". In this case, start the service manually. Furthermore, when restarting from Service Management Tools, the service will restart properly.

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11.5. The Log Files and Support Button

- Below are the log files which were created at the installation of ASFALIS TransServer and Slave Node. Please refer to them in case something has gone wrong.

  <Installation folder ASFALIS TransServer>/log/*.log
  <Installation folder ASFALIS Component>/log/slave_node_(port number).log

- The log files displayed in Job detail page
  When the log files of each Component are generated, links to them are displayed in Job detail page. If an input file name includes multibyte characters, they are displayed by "?" in the linked page.
- Regarding [Support] button displayed in Job detail page
  In case a translation failed with a Job status "terminated" or "abend", you can use the files in execute directory for the investigation. Administrators or Users who belong to JobAdmins group can download them from [Support] button in Job detail page.

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12. Appendix

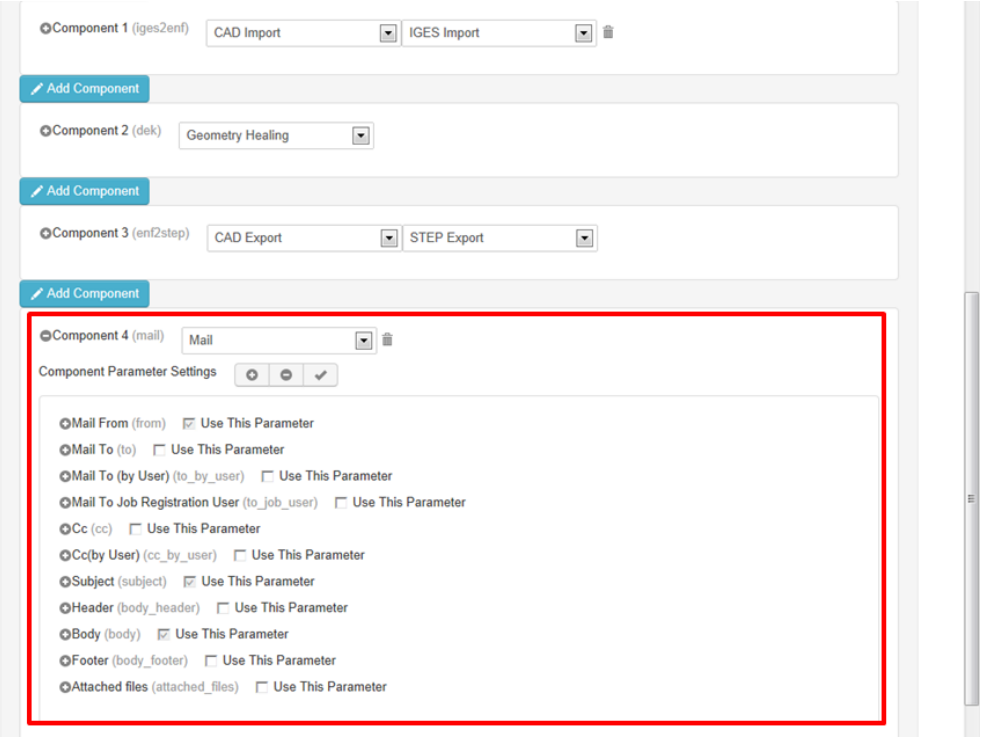
12.1. Mail Component

By using "Mail" Component, you can receive notification messages via email once the Job has been completed. The notification messages can contain the Job information. Administrator needs to set up server configurations to send the notification mail in advance. Please refer to "2.4, “Server Configurations”."

12.1.1. Sample Scenario

Component 1 CAD Import (IGES Import)
Component 2 Geometry Healing
Component 3 CAD Export (STEP Export)

To receive notification mail after executing the above-mentioned translation, add "Mail" Component as Component 4.



It is possible to use the following variables in the subject, header, body and footer of the mail.

Input file name	#{component.(Component Instance name).param.inputfile} e.g.,) #{component.iges2enf.param.inputfile}
Output file name	#{component.(Component Instance name).param.outputfile} e.g.,) #{component.enf2step.param.outputfile}
Scenario name	#{scenario.name@"Locale Name"}

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URL of the "Job Detail" page	{serverconfig.web.common.server_base_address}/jobs/{job.id}

Please replace (Component Instance name) with the string displayed next to the Component name.

Locale Name: Specify "en-US", "ja-JP", "de-DE", and "zh-CN".

12.2. Stop Job Component

This is a Component to stop a Job when the results of previous Components satisfy specified conditions. (* Job status will be "Abend".) Specify conditions to stop a Job with a parameter "execute_condition" using "execute_if".
Below are sample cases.

E.g.) Stop when PDQ error "Self-intersecting Surface (G-SU-IS)" is detected while processing "Check Geometry (enfchecker)" Component

```
execute_if #{component.enfchecker.pdq["G-SU-IS"].count} > 0
```

E.g.) Stop when an extended error occurs while processing "Geometry Healing (dek)" Component

```
execute_if #{component.dek.ExtendedErrors.count} > 0
```

12.3. What is Confidential Information Eliminating Tool?

The confidential information eliminating tool is a function to delete (technically, replace with non-informative strings) highly-confidential information from the database of ASFALIS TransServer.
This function is a great solution for Users concerning the information security when sending the database to the support desk to solve the issues. It removes the confidential information from the database of ASFALIS TransServer so that you can send security-safe information for the investigation to Elysium, local support etc.

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12.3.1. Basic Operation Flow

Prepare security-safe ASFALIS TransServer database as follows.
(Detailed procedure for Step 2 and 3 are described at next section below.)

1. Back up the database.
   (Please refer to the administrator manual for how to back up the database.)
2. Execute the confidential information eliminating command on ASFALIS TransServer database. (trial run)
   You can check which data will be deleted prior to the actual run at this stage.
3. Execute the confidential information eliminating command on ASFALIS TransServer database. (actual run)
   The database will be updated as previewed at Step 2 above.
4. Back up the database to send one for an investigation.
   (Please refer to the administrator manual for how to back up the database.)
5. Restore the database backed up at Step 1 above.
   (Please refer to the administrator manual for how to restore the database.)

> Important)
> **Please be aware that this operation directly updates the actual database of ASFALIS TransServer. Please ensure to build a test environment by restoring backup database of the production environment and perform the confidential information eliminating command on to the test environment which is fully independent from the production environment.**

12.3.2. Previewing the Result of the Command

1. Run <ASFALIS TransServer Install Directory>\k2dashboard\start-console.bat and execute the following command in the opened command line interface;

   ```
   >bundle exec rake support:filter_private_data  FILTER_CONFIG_PATH="<ATS Install
   Directory>\config\filter_private_data_config.rb"
   ```

   - "filter_private_data_config.rb" is placed under <ASFALIS TransServer Install Directory>\config folder. Modify the value for "FILTER_CONFIG_PATH" according to your environment.
   - Please ensure that ASFALIS TransServer is not running before executing this command.
2. The confidential information checking files (*.csv) will be exported to <ASFALIS TransServer Install Directory>\k2dashboard\ once Step 1 above is completed.
   They are to check which data will be deleted / which data will remain prior to the actual deletion, and consist of three CSV files below;

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i. Filter List (filter_private_data_detail_filtered.csv)
   - Character strings to be deleted

ii. White List (filter_private_data_detail_white.csv)
   - Character strings to remain which seems non-confidential
     You do not need to check this file for most of the cases.

iii. Gray List (filter_private_data_detail_gray.csv)
   - Character strings to remain which may contain some confidential information

Modify (*1) the configuration file (filter_private_data_config.rb) accordingly when you wish to remove some of the information in Grey List, and then start again from Step 1.
(*1) For example, add the column which contains confidential information to the filter item list. When editing the confidential information manually, edit them directly using PostgreSQL managing tool such as "pgAdmin 4." Grey List contains the information on the table names and IDs of the database by default.

12.3.3. Actual Run of the Tool (Updating the Database)

1. Run <ASFALIS TransServer Install Directory>\k2dashboard\start-console.bat and execute the following command in the opened command line interface;

   ```
   >bundle exec rake support:filter_private_data FILTER_CONFIG_PATH="<ATS Install
   Directory>\config\filter_private_data_config.rb" DRY_RUN=NO
   ```

   - "filter_private_data_config.rb" is placed under <ASFALIS TransServer Install Directory>\config folder. Modify the value for "FILTER_CONFIG_PATH" according to your environment.
   - Please ensure that ASFALIS TransServer is not running before executing this command.

2. The confidential information checking files (*.csv) will be exported to <ASFALIS TransServer Install Directory>\k2dashboard\, and the actual database will be updated as described in the CSV files once Step 1 above is completed.

Actual database of the ASFALIS TransServer will be updated, and you can start ASFALIS TransServer again at this stage.

- Please note that the password for the default User "admin" will be initialized to "admin."

12.3.4. Notes

Please note that;

- This function deletes the specified information in the database, but does not apply any changes on to the actual CAD data etc.
- This function deletes the string data (TRUE/FALSE value, integer number value, character

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strings, dates etc.) in the database only.

- This function does not delete the parameter keys and values for ASFALIS Components by default because they are necessary and important information for the investigation. Please modify the configuration file to delete the confidential information if necessary when you are utilizing "Mail" Component etc.
- This function does not delete the information on the server settings (including information on how to access to ASFALIS TransServer) except the passwords, and the information to identify the Slave Node such as host names and port numbers by default.
  On the other hand, this function does delete the client information such as IP addresses by default.

12.4. How to Change the Resource Folder

Change the folder path as follows to change the resource folder of ASFALIS TransServer, e.g., due to a disk full error.

1. Stop ASFALIS TransServer if it is running.
2. Run "<installation-path>\k2dashboard\start-console.bat" and run the following command and specify a new resource folder in the opened command line interface to copy the resource folder to it.
   Command:

   ```
   >bundle exec rake ats:resources:copy RESOURCE_PATH=(Absolute path to the new resource folder)
   ```

   Please ensure to specify either the local drive path or UNC path as the resource folder path. Avoid specifying a path which includes a network drive (For example, N:\transserver\resources) because ASFALIS TransServer may not run properly.

3. Delete the old resource folder.
4. Open the following file with a text editor, edit the value of "PrivateResourcePath" in [K2server] section to specify the new resource folder by its absolute path, and save.
   <ASFALIS TransServer installation folder>\config\k2server.ini
5. Start ASFALIS TransServer.

12.5. How to Change the Shared Folder

Change the folder path as follows to change the shared folder of ASFALIS TransServer.

1. Stop ASFALIS TransServer if it is running.
2. Open the following file with a text editor, edit the folder path defined with "@set

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SHARED_FOLDER=", and save.
<ASFALIS TransServer installation folder>\set_ruby_env.bat

3. Start ASFALIS TransServer.

Note)

- Please ensure to assign a large capacity drive for the shared folder of ASFALIS TransServer. Both the output folder and the work folder will be created under it.
- Please note that UNC path (path starting with "\\") cannot be used as the shared folder.
- Please note that root directories of drives (e.g., "C:\") cannot be used as the shared folder.

12.6. Import

This is a function to import various information used in ASFALIS TransServer by JSON format via command line interface. (Some can be set from the ASFALIS TransServer User interface [Administration].)

This function allows to import the information exported from other ASFALIS TransServer environment in JSON file, and also synchronize the user and group information between external systems and ASFALIS TransServer using JSON file exported from other systems.

Note)
Please ensure that JSON files imported using this function is;

- Written in the format that complies to RFC4627
- Encoded in UTF-8

Please also ensure to stop ASFALIS TransServer to import JSON file from the command line interface.

12.6.1. Importing Users

Run "<installation-path>\k2dashboard\start-console.bat" and run the following command and specify the file path to JSON file in the opened command line interface to import users for ASFALIS TransServer.
Command:

```
bundle exec rake ats:users:import ATS_USERS_IMPORT_FILE=C:\path\to\users.json
```

- How to create JSON files

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Create JSON files in the following format and save as *.json in any local folder.

Layer	Node Name	Description	Type	Mandatory
1	format_version	Specify 1.	int	Yes
1	users	-	array of object	Yes
2	(user)	-	object	-
3	login_name	Specify the login name. The system will register as a new User when specified "login_name" does not exist on the database, or update the existing User when found.	string	Yes
3	default	Specify the default setting (specified with "user_defaults") to use by its name specified with "$id". (The default settings should be specified in the same JSON file with "user_defaults".) This is effective only when creating new Users, and will be ignored when updating existing Users.	object	-
3	password	Specify the login password. Please note that a random password will be set when this is not specified, and there is no way to retrieve it.	string	-
3	name	Specify the followings nested by using the locale name as a key; - first_name - family_name - name_format_type Please ensure that all three items above are specified for each locale name. "family_first", "family_space_first" or "first_space_family" can be specified for "name_format_type	object	Yes
3	email	Specify the email address of the User. The default is blank.	string	-

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Layer	Node Name	Description	Type	Mandatory
3	is_mail_component_mail_recipient	Specify whether to send notification messages when the own Job is completed by "true" or "false". You can apply the value specified by "default" in the same JSON file as well. (Don’t specify this in that case.)	boolean	-
3	is_error_mail_recipient	Specify whether to send notification messages to this User when the own Job (submitted by this User) was not "succeeded" by "true" or "false". You can apply the value specified by "default" in the same JSON file as well. (Don’t specify this in that case.)	boolean	-
3	is_login_enable	Specify whether to enable login by "true" or "false". You can apply the value specified by "default" in the same JSON file as well. (Don’t specify this in that case.)	boolean	-
3	is_editable_email	Specify whether to allow Users to edit their email address by themselves. You can apply the value specified by "default" in the same JSON file as well.	boolean	-
3	permissions	Specify the "Permission to Other User/Group". "Permit Download" permission to imported user him/herself is set automatically.	array of object	-
4	(permission)	-	object	-
5	permission_code	Specify the permission level by the following number; 1: Read, 2: Permit Download	int	Yes

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Layer	Node Name	Description	Type	Mandatory
5	login_name	Specify the Users to give permission to by their login names specified with "login_name".	array of string	Either is mandatory
5	group_id	Specify the groups to give permission to by their group IDs set automatically by ASFALIS TransServer.	array of int	
5	group_unique_alias	Specify the groups to give permission to by their group unique alias (identifier) specified with "unique_alias". Set "TRUE" for "system.use_groups_unique_alias" from the [Server Configurations] to show Unique Alias of groups.	array of string	
3	groups	Specify all the belonging Groups by their Group unique alias.	array of object	- (*1a)
3	groups_to_add	Specify the belonging Group(s) to add by their Group unique alias.	array of object	- (*1b)
3	groups_to_remove	Specify the belonging Group(s) to remove by their Group unique alias.	array of object	- (*1b)
3	memo	Specify to leave memos. You can apply the value specified by "default" in the same JSON file as well.	string	-
3	time_zone	Specify the time zone. You can apply the value specified by "default" in the same JSON file as well. (Don’t specify this in that case.)	string	-
3	language_priority	Specify the priority order of the language by the order of locale names. You can apply the value specified by "default" in the same JSON file as well. (Don’t specify this in that case.)	array of string	-
3	character_code	Specify the character code to use when this User uploads/downloads files. You can apply the value specified by "default" in the same JSON file as well. (Don’t specify this in that case.)	string	-
3	is_enable_ldap	Specify whether to use LDAP authentication by "true" or "false".	boolean	-

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Layer	Node Name	Description	Type	Mandatory
3	ldap_account_name		string	-
3	external_owner	Specify the name of the external system connected to ASFALIS TransServer.	string	-
1	user_defaults	Specify the default settings which can be applied when registering new Users.	array of object	-
2	(user_default)		object	-
3	$id	Specify the set ID for a default settings. The default settings will be referred from "users" by this value.	string	YES
3	is_mail_component_mail_recipient	Specify whether to send notification messages to this User when the own Job is completed by "true" or "false". (For default settings)	boolean	-
3	is_error_mail_recipient	Specify whether to send notification messages to this User when the own Job (submitted by this User) was not "succeeded" by "true" or "false". (For default settings)	boolean	-
3	is_login_enable	Specify whether to enable login by "true" or "false". (For default settings)	boolean	-
3	is_editable_email	Specify whether to allow each User to change their email address for email notification afterward by "true" or "false". (For default settings)	boolean	-
3	memo	Specify to leave a memo. (For default settings)	string	-
3	time_zone	Specify the time zone. (For default settings)	array of string	-
3	language_priority	Specify the priority order of the language by the order of locale names. (For default settings)	array of string	-
3	character_code	Specify the character code to use when this User uploads/downloads files. (For default settings)	string	-

*1: (*1a) and (*1b) cannot be specified in combination.

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Below is a sample JSON file.

```
{
    "format_version": 1,
    "users":
    [
        {
            "login_name": "test_user_1",
            "password": "test_user_1",
            "default": {
                "$ref": "user_default_1"
            },
            "external_owner":
            "LDAP://dc1.example.com/CN=User_1,DC=example,DC=com",
            "name":
            {
                "ja-JP":
                {
                    "first_name": "テスト用",
                    "family_name": "ユーザ",
                    "name_format_type": "first_space_family"
                },
                "en-US":
                {
                    "first_name": "for test",
                    "family_name": "User",
                    "name_format_type": "family_space_first"
                }
            },
            "groups": [
                "group_alias_1",
                "group_alias_2
            ],
            "language_priority": [
                "ja-JP",
                "en-US",
                "de-DE"
            ],
            "email": "test@example.com",
            "is_login_enable": true,
            "is_editable_email": true,
            "is_error_mail_recipient": true,
            "is_mail_component_mail_recipient": true,
            "time_zone": "Tokyo",
            "character_code": "Shift_JIS"
        },
        {
            "login_name": "test_user_2",
```

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```
            "default": {
                "$ref": "user_default_1"
            },
            "external_owner":
                "LDAP://dc1.example.com/CN=User_2,DC=example,DC=com",
            "name":
            {
                "ja-JP":
                {
                    "first_name": "テスト用",
                    "family_name": "ユーザ 2",
                    "name_format_type": "first_space_family"
                },
                "en-US":
                {
                    "first_name": "for test 2",
                    "family_name": "User",
                    "name_format_type": "family_space_first"
                }
            },
            "groups_to_add": [
                "group_alias_1"
            ],
            "groups_to_remove: [
                "group_alias_2"
            ]
        }
    ],
    "user_defaults":
    [
        {
            "$id": "user_default_1",
            "language_priority": [
                "ja-JP",
                "en-US",
                "de-DE"
            ],
            "is_login_enable": false,
            "is_editable_email": true,
            "is_error_mail_recipient": true,
            "time_zone": "Tokyo",
            "character_code": "Shift_JIS"
        }
    ]
}
```

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12.6.2. Importing Groups

Run "<installation-path>\k2dashboard\start-console.bat" and run the following command and specify the file path to JSON file in the opened command line interface to import groups for ASFALIS TransServer.
Command:

```
bundle exec rake ats:groups:import ATS_GROUPS_IMPORT_FILE=C:\path\to\groups.json
```

- How to create JSON files
  Create JSON files in the following format and save as "*.json" in any local folder.

Layer	Node Name	Description	Type	Mandatory
1	format_version	Specify 1.	int	Yes
1	groups	-	array of object	Yes
2	(groups)	-	object	-
3	unique_alias	Specify the group unique alias (identifier). Existing group will be updated when a group under the same unique alias is found, or a group will be registered as a new one when not.	string	Yes
3	external_owner	Specify the name of the external system connected to ASFALIS TransServer.	string	-
3	name	Specify the group name. Please ensure to specify at least for one locale name when registering new groups.	object	-
3	permissions	Specify the "Permission to Other User/Group". "Permit Download" permission to imported group itself is set automatically.	array of object	-
4	(permission)	-	object	-
5	permission_code	Specify the permission level by the following number; 1: Read, 2: Permit Download	int	Yes

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Layer	Node Name	Description	Type	Mandatory
5	login_name	Specify the Users to give permission to by their login names specified with "login_name".	array of string	Either is mandatory
5	group_id	Specify the groups to give permission to by their group IDs set automatically by ASFALIS TransServer.	array of int	
5	group_unique_alias	Specify the groups to give permission to by their group unique alias (identifier) specified with "unique_alias". Set "TRUE" for "system.use_groups_unique_alias" from the [Server Configurations] to show Unique Alias of groups.	array of string	
4	$(locale_name)	-	string	*1
3	child_groups	Specify all the child Groups by their Group unique alias.	array of string	- (*2a)
3	child_groups_to_add	Specify the child Group(s) to add by their Group unique alias.	array of object	- (*2b)
3	child_groups_to_remove	Specify the child Group(s) to remove by their Group unique alias.	array of object	- (*2b)
3	child_users	Specify all belonging Users by their login name.	array of string	- (*3a)
3	child_users_to_add	Specify the User(s) to add by their login name.	array of object	- (*3b)
3	child_users_to_remove	Specify the User(s) to remove by their login name.	array of object	- (*3b)
3	is_root	Specify whether to set this group as Root by "true" or "false".	boolean	-

*1: Replace "$(locale_name)" with locale names such as "ja-JP", "en-US", "de-DE", and "zh-CN". At least one locale name is required.
*2: (*2a) and (*2b) cannot be specified in combination.
*3: (*3a) and (*3b) cannot be specified in combination.

Below is a sample JSON file.

```
{
    "format_version": 1,
```

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```
    "groups": [
        {
            "unique_alias": "Group_1",
            "external_owner":
                "LDAP://dc1.example.com/CN=Group_1,DC=example,DC=com",
            "child_groups": [
                "Group2"
            ],
            "child_users_to_add": [
                "user_name_1"
            ],
            "child_users_to_remove": [
                "user_name_2"
            ],
            "name": {
                "ja-JP": "グループ1",
                "en-US": "Group_1"
            }
        },
        {
            "unique_alias": "Group_2",
            "external_owner":
                "LDAP://dc1.example.com/CN=Group_2,DC=example,DC=com",
            "child_groups": [
                "Group_3"
            ],
            "name": {
                "ja-JP": "グループ2",
                "en-US": "Group_2"
            }
        },
        {
            "unique_alias": "Group_3",
            "external_owner":
                "LDAP://dc1.example.com/CN=Group_3,DC=example,DC=com",
            "child_groups_to_add": [
                "group_alias_1"
            ],
            "child_groups_to_remove": [
                "group_alias_2"
            ],
            "child_users": [
                "user_1"
            ],
            "name": {
                "ja-JP": "グループ3",
                "en-US": "Group_3"
            }
        }
```

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```
    ]
}
```

12.6.3. Importing Operation Types

Run "<installation-path>\k2dashboard\start-console.bat" and run the following command and specify the file path to JSON file in the opened command line interface to import Operation Types for ASFALIS TransServer.
Command:

```
bundle exec rake ats:job_lot_templates:import
ATS_JOB_LOT_TEMPLATES_IMPORT_FILE=C:\path\to\job_lot_templates.json
```

- How to create JSON files
  Create JSON files in the following format and save as "*.json" in any local folder.

Layer	Node Name	Description	Type	Mandatory
1	format_version	Specify 1.	int	Yes
1	job_lot_templates	-	array of object	Yes
2	(job_lot_template)	-	object	-
3	id	Specify Operation Type ID to update existing Operation Types, and specify nothing to register a new Operation Type.	int	*2
3	name	Specify the name of Operation Type. Please ensure to specify at least for one locale name when registering new operation types.	object	*3
4	$(locale_name)	-	string	*1
3	priority	Specify the priority level of this Operation Type by the following number; 1: Low 2: Medium 3: High 4: Extra high This will be set to low when nothing is specified. Jobs with the higher priority will be prioritized when multiple Jobs are in the queue.	int	-

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Layer	Node Name	Description	Type	Mandatory
3	login_name	Specify the User to create this Operation Type by the "login_name".	string	YES
3	external_owner	Specify the name of the external system connected to ASFALIS TransServer.	string	-
3	is_erased	Specify "true" to disable this Operation Type.	boolean	-
3	scenarios	Specify Scenarios available for this Operation Type. This information will not be updated when nothing is specified.	array of object	-
4	(scenario)	-	object	-
5	id	Specify the Scenario available for this Operation Type by its ID.	int	Either is mandatory
5	unique_alias	Specify the Scenario available for this Operation Type by its unique alias (identifier).	string	
3	permissions	Specify the maximum permission level on Operations under this Operation Type for Users and groups. "JobAdmins" will be set to "Edit/Delete" permission automatically.	array of object	-
4	(permission)	-	object	-
5	permission_code	Specify the permission level by the following number; 1: Read, 2: Download, 3: Edit/Delete	int	Yes

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Layer	Node Name	Description	Type	Mandatory
5	login_name	Specify the Users to give permissions to by their login names specified with "login_name".	array of string	Either is mandatory
5	group_id	Specify the groups to give permissions to by their group IDs set automatically by ASFALIS TransServer.	array of int	
5	group_unique_alias	Specify the groups to give permissions to by their group unique alias (identifier) specified with "unique_alias". Set "TRUE" for "system.use_groups_unique_alias" from the [Server Configurations] to show Unique Alias of groups.	array of string	
3	job_lot_property_definitions	Specify the definition of properties to set to this Operation Type.	array of object	-
4	(job_lot_property_definition)	-	object	-
5	key_name	Specify the property to set to this Operation Type by its key name. Existing property will be updated when a property under the same key name is found, or a property will be registered as a new one when not.	string	Yes
5	label	Specify the label to put to this Operation Type. Please ensure to specify at least one locale name when registering new Operation Types.	object	*3
6	$(locale_name)	-	string	*1
5	description	Specify the description of properties to set to this Operation Type. Please ensure to specify at least for one locale name when registering new Operation Types.	object	*3
6	$(locale_name)	-	string	*1
5	value_constraint	Specify the constraints on the values for each item.	string	-

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Layer	Node Name	Description	Type	Mandatory
5	value_type	Specify the value type for Operation properties. This is mandatory when registering new Operation properties, but don't specify when updating existing Operation properties. Value types are unamendable once registered.	string	*3
5	value	Specify the value of the Operation property. Specify the file to upload by its full path when value type is "File"	string	*3
5	is_editable	Specify whether to allow Users to edit the Operation Attribute on "Add New Operation" page by "true" or "false". "false" will be set automatically when nothing is specified.	boolean	-
5	is_visible	Specify whether to allow Users to see the Operation Attribute on "Add New Operation" page by "true" or "false". "false" will be set automatically when nothing is specified	boolean	-
5	is_always_editable	Specify whether to allow Users to edit the Operation Attribute on "Operation Detail" page by "true" or "false". "false" will be set automatically when nothing is specified.	boolean	-
5	is_searchable	Specify whether to allow Users to use the Operation Attribute as search condition on advanced search of Operation by "true" or "false". "false" will be set automatically when nothing is specified.	boolean	-
5	values	Specify the value sets (selectable values of Operation property) when value type is "RadioButton" or "Pulldown". This will overwrite all the values for each Operation property, so please ensure to specify including already-registered values to keep them when updating existing value sets. Don't specify this for other value types.	array of object	*4

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Layer	Node Name	Description	Type	Mandatory
6	(value)	-	object	-
7	value	Specify the value of each option in the value set of Operation property specified with "values".	string	Yes
7	description	Specify the description of each value of Operation property. Please ensure to specify at least one locale name when registering new Operation properties.	object	*3
8	$(locale_name)	-	string	*1
5	subwindow_url	Specify the value of Operation property by subwindow URL when value type is "Sub Window". Don’t specify this for other value types.	string	-

*1: Replace "$(locale_name)" with locale names such as "ja-JP", "en-US", "de-DE", and "zh-CN".
*2: This is mandatory when updating existing Operation Types.
*3: This is mandatory when registering new Operation Types.
*4: This is mandatory when value type is "RadioButton" or "Pulldown".

Below is a sample JSON file.

```
{
    "format_version": 1,
    "job_lot_templates":
    [
        {
        "name":
            {
                "ja-JP": "業務種別登録テスト",
                "en-US": "registering Operation Type test"
            },
            "external_owner": "CN=JobLotTemplate_1,DC=example,DC=com",
            "priority": 4,
            "login_name": "admin",
            "is_erased": false,
            "scenarios":
            [
                {
                    "id": 500000
                }
            ],
```

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```
            "permissions":
            [
                {
                    "group_unique_alias": ["Everyone"],
                    "permission_code": 1
                }
            ],
            "job_lot_property_definitions":
            [
                {
                    "key_name": "text1",
                    "value_type": "text",
                    "label":
                    {
                        "ja-JP": "テキスト1",
                        "en-US": "Text1"
                    },
                    "description":
                    {
                        "ja-JP": "これはテキスト1です",
                        "en-US": "This is Text1."
                    },
                    "value": "aaa",
                    "is_editable": true,
                    "is_visible": true,
                    "is_always_editable": false,
                    "is_searchable": true,
                    "value_constraint": "input_not_blank"
                },
                {
                    "key_name": "subwindow1",
                    "value_type": "subwindow",
                    "label":
                    {
                        "ja-JP": "サブウィンドウ1",
                        "en-US": "Subwindow1"
                    },
                    "description":
                    {
                        "ja-JP": "これはサブウィンドウ1です",
                        "en-US": "This is Subwindow1."
                    },
                    "value": "subsubsub",
                    "is_editable": false,
                    "is_visible": true,
                    "is_always_editable": false,
                    "is_searchable": true,

 "subwindow_url":"http://localhost:3000/samples/clientAPI_sample/subwindow_page.html
```

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```
"
                },
                {
                    "key_name": "radio1",
                    "value_type": "radiobutton",
                    "label":
                    {
                        "ja-JP": "ラジオ1",
                        "en-US": "Radio1"
                    },
                    "description":
                    {
                        "ja-JP": "これはラジオボタン1です",
                        "en-US": "This is Radiobutton1."
                    },
                    "value": "2",
                    "is_editable": true,
                    "is_visible": true,
                    "is_always_editable": true,
                    "is_searchable": true,
                    "values":
                    [
                        {
                            "value": "1",
                            "description":
                            {
                                "ja-JP": "これはいちです",
                                "en-US": "This is one"
                            }
                        },
                        {
                            "value": "2",
                            "description":
                            {
                                "ja-JP": "これはにです",
                                "en-US": "This is two"
                            }
                        },
                        {
                            "value": "3",
                            "description":
                            {
                                "ja-JP": "これはさんです",
                                "en-US": "This is three"
                            }
                        }
                    ]
                }
            ]
```

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```
        }
    ]
}
```

12.6.4. Importing Scenarios

Run "<installation-path>\k2dashboard\start-console.bat" and run the following command and specify the file path to JSON file in the opened command line interface to import Scenarios for ASFALIS TransServer.
Command:

```
bundle exec rake ats:scenarios:import
ATS_SCENARIOS_IMPORT_FILE=C:\path\to\scenarios.json
```

You can import related files including Component Templates and Custom Components which will be utilized in the Scenario at the same time.

- How to create JSON files
  Create JSON files in the following format and save as "*.json" in any local folder.

Layer	Node Name	Description	Type	Mandatory
1	format_version	Specify 1.	int	Yes
1	scenarios	-	array of object	Yes
2	(scenario)	-	object	-
3	id	Specify Scenario ID to update existing Scenarios, and specify nothing to register a new Scenario.	int	*1
3	unique_alias	Specify the Scenario unique alias (identifier). Existing Scenario will be updated when a Scenario under the same unique alias is found, or a Scenario will be registered as a new one when not. Unique alias will be set automatically when nothing is specified.	string	
3	name	Specify the name of the Scenario. Please ensure to specify at least for one locale name when registering new Scenario.	object	-

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Layer	Node Name	Description	Type	Mandatory
4	$(locale_name)	-	string	*L
3	description	Specify the description of this Scenario.	object	-
4	$(locale_name)	-	string	-
3	login_name	Specify the User to create this Scenario by the login name specified with "login_name".	string	Yes
3	external_owner	Specify the name of the external system connected to ASFALIS TransServer.	string	-
3	is_erased	Specify whether to register a Scenario / update an existing Scenario as "Deleted (Deactivated)" by "true" or "false". This will be set to "false" when nothing is specified.	boolean	-
3	permissions	-	array of object	-
4	(permission)	-	-	-
5	permission_code	Specify whether to give a permission to view and use this Scenario to the Users/groups specified below, by the following values; 0: Don’t give permissions 1: Allow User/Group to view and use this Scenario	int	*2
5	login_name	Specify the Users to allow permissions by their login name specified with "login_name".	array of string	-
6	(login_name)	-	string	-
5	group_id	Specify the groups to allow permissions by their group IDs.	array of int	-
6	(group_id)	-	int	-
5	group_unique_alias	Specify the groups to allow permissions by their login name specified with "login_name".	array of string	-
6	(group_unique_alias)	-	string	-

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Layer	Node Name	Description	Type	Mandatory
3	job_lot_templates	Specify Operation Types to make this Scenario available to.	object	-
4	id	Specify Operation Types by their IDs in array.	array of int	-
4	unique_alias	Specify Operation Types by their unique alias in array.	array of string	-
3	component_instances	-	array of object	Yes
4	(component_instance)	-	object	-
5	name	Specify the name of the Components to use in the Scenario. Name as "iges2enf", "iges2enf2", "iges2enf3" ... to distinguish them when using the same Component multiple time within a Scenario.	string	Yes
5	component_internal_name	Specify the Components to use in the Scenario by its internal name. Specify the same name even when using the same Component multiple time within a Scenario.	string	
5	template_unique_alias	Specify the Component Template by its unique alias (identifier). Skip specifying this when specifying with "parameters" below.	string	-
5	parameters	Specify parameters and their values for the Component. Leave this blank to set no parameters.	array of object	*3
6	(parameter)	-	object	-
7	key_name	Specify the parameter to use by its key name.	string	*4
7	value	Specify the parameter value. Value type differs depending on the parameter.	-	*4
7	is_mandatory	Specify whether to enable "Users must set this parameter" by "true" or "false".	boolean	*4

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Layer	Node Name	Description	Type	Mandatory
7	is_editable	Specify whether to enable "specified later, when a Job is registered" by "true" or "false".	boolean	*4
7	is_visible	Specify whether to enable "Visible for User" by "true" or "false".	boolean	*4
5	sub_component_instances	Specify the Sub-Component.	array of object	*5
6	(sub_component_instance)	-	object	-
7	sub_process_name	Specify the sub process by its name. Sub process name consists of "<Component name>_<sub process name>", and please write the sub process name only for this.	string	*5
7	parameters	Specify parameters and their values for the Sub-Component. Leave this blank to set no parameters.	array of object	
8	(parameter)	-	object	-
9	key_name	Specify the parameter to use by its key name.	string	*5
9	value	Specify the parameter value. Value type differs depending on the parameter.	-	*5
9	file_path	Specify the relative file path to the parameter files. The type will be: - string: for single-file type parameters - array of string: for multiple-file type parameters	string / array of string	*5
9	is_mandatory	Specify whether to enable "Users must set this parameter" by "true" or "false".	boolean	*5
9	is_editable	Specify whether to enable "specified later, when a Job is registered" by "true" or "false".		*5
9	is_visible	Specify whether to enable "Visible for User" by "true" or "false".		*5

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Layer	Node Name	Description	Type	Mandatory
3	component_instance_relations	Specify the connection information between Components.	array of object	Yes
4	(component_instance_relation)	-	object	-
5	source_component_instance	Specify the previous Component (specified with "component_instance") by its name specified with "name".	string	Yes
5	source_component_parameter	Specify the Key whose IO Type is "out". You can check the IO parameter information in "Component Detail" page.	string	Yes
5	target_component_instance	Specify the following Component (specified with "component_instance") by its name specified with "name".	string	Yes
5	target_component_parameter	Specify the Key whose IO Type is "in". You can check the IO parameter information in "Component Detail" page.	string	Yes
1	component_templates	Please refer to [12.6.6, “Importing Custom Components”] for the details about Component templates.	array of object	-
1	components	Please refer to [9.2, “Custom Component”] for the details about Custom Components.	array of object	-

*1: A new Scenario will be created under an automatically-set identifier (unique alias) when both "id" and "unique_alias" are not specified.
*2: This is mandatory when specifying "permissions".
*3: This is mandatory when specifying a Component which has mandatory parameters.
*4: This is mandatory when specifying "parameters".
*5: This is mandatory when specifying "Simplification" or "Polygon Optimizer" Component.
*L: Replace "$(locale_name)" with locale names such as "ja-JP", "en-US", "de-DE", and "zh-CN".

Below are samples to explain how to specify parameter values under "value" or "file_path" depending on the value type.

- Text Type
  Specify the parameter value with "value".

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```
{
    "key_name": "body",
    "value": "message in body",
    ...
},
{
    "key_name": "StitchTol",
    "value": 2,
    ...
}
```

- Pulldown / ComboBox Type
  Specify one of the items available for the pull-down menu with "value".

```
{
    "key_name": "to_cad",
    "value": "iges",
    ...
},
{
    "key_name": "CADVersion",
    "value": "B23",
    ...
}
```

- RadioButton Type
  Specify one of the items available for the radio button with "value".

```
{
    "key_name": "CleanSelfIntersectingLoop",
    "value": 2,
    ...
}
```

- Boolean Type
  Specify "true" or "false" with "value". It will be treated as "false" when nothing is specified.

```
{
    "key_name": "to_job_user",
    "value": true,
    ...
}
```

- Bit Flag Type

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A unique number is assigned for each value (checkbox) for the parameter.
Specify the sum of these numbers of checkboxes to check.

```
{
    "key_name": "RemoveDuplicateSurface",
    "value": 7,
    ...
}
```

- Single-value Parameters (Specify the directory to transfer to)
  To transfer data to external file servers, specify the file server by its ID and the folder path to transfer to. Files will be transferred to the directory specified with a period ".".

```
{
    "key_name": "result_base_directory",
    "value": {
        "file_server": "1",
        "path": "dir/subdir/."
    },
    ...
}
```

- Multi-value Parameters (e.g., "additional_file_keys" parameter for "Transfer to Windows File Server" Component)
  Specify multiple values in array.

```
{
    "key_name": "additional_file_keys",
    "value": ["key1", "key2"],
    ...
}
```

- File type (Single-value Parameters)
  Specify the relative file path from the folder where JSON file is placed. When uploading from the browser, compress to a ZIP file while maintaining the folder structure.

```
{
    "key_name": "mapfile",
    "file_path": "./dir/mapfile_sample.xml",
    ...
}
```

- File type (Multi-value Parameters)
  Specify the relative file paths from "k2dashboard" folder in array.

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Specify the relative file paths from the folder where JSON file is placed in array.
When uploading from the browser, compress to a ZIP file while maintaining the folder structure.

```
{
    "key_name": "attached_files",
    "file_path": [
        "./dir/01/test1.txt",
        "./dir/02/test1.txt"
    ],
    ...
}
```

- File Type Parameters with Keys
  Specify the key name and the relative path from the folder where JSON file is placed in array of hashes. Specify in array to specify multiple values. Or upload from the User interface by compressing to a ZIP file while maintaining the folder structure.

```
{
    "key_name": "parameterfile_list",
    "value": [
        {
            "key_name" : "key1",
            "file_path" : "./dir/key1/test1.txt"
        },
        {
            "key_name" : "key2",
            "file_path" : ".dir/key2/test1.txt"
        }
    ],
    ...
}
```

- Password Type Parameters
  Specify the encrypted password and the salt.

```
{
    "key_name": "password",
    "value": "2ff9ad2828bc4e2fdaee413e559a22b9",
    "salt": "U13MF9r4",
    ...
}
```

Below is a sample JSON file to import a Scenario of [CATIA V5 Import] → [Transfer to Windows File Server] → [Mail].

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```
{
    "format_version": 1,
    "scenarios": [
        {
            "unique_alias": "Scenario_1",
            "is_erased": false,
            "external_owner": "CN=Scenario_1,DC=example,DC=com",
            "name": {
                "ja-JP": "シナリオ1",
                "en-US": "Scenario_1"
            },
            "description": {
                "ja-JP": "これはシナリオ1です",
                "en-US": "This is Scenario_1"
            },
            "permissions": [
                {
                    "login_name": [
                        "user_1"
                    ],
                    "group_unique_alias": [
                        "ScenarioAdmins",
                        "NamedUsers"
                    ],
                    "permission_code": 1
                }
            ],
            "component_instances": [
                {
                    "name": "catiav52enf",
                    "component_internal_name": "catiav52enf",
                    "parameters": [
                        {
                            "key_name": "ConvertPartwise",
                            "value": "0",
                            "is_mandatory": true,
                            "is_editable": false,
                            "is_visible": true
                        }
                    ]
                },
                {
                    "name": "copy_to_cifs",
                    "component_internal_name": "copy_to_cifs",
                    "parameters": [
                        {
                            "key_name": "result_base_directory",
                            "value": {
```


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```
                            "file_server": "1",
                            "path": "."
                        },
                        "is_mandatory": true,
                        "is_editable": true,
                        "is_visible": true
                    }
                ]
            },
            {
                "name": "mail",
                "component_internal_name": "mail",
                "parameters": [
                    {
                        "key_name": "from",
                        "value": "test@mail.com",
                        "is_mandatory": true,
                        "is_editable": true,
                        "is_visible": true
                    },
                    {
                        "key_name": "body",
                        "value": "body",
                        "is_mandatory": true,
                        "is_editable": true,
                        "is_visible": true
                    },
                    {
                        "key_name": "subject",
                        "value": "subject",
                        "is_mandatory": true,
                        "is_editable": true,
                        "is_visible": true
                    }
                ]
            }
        ],
        "component_instance_relations": [
            {
                "source_component_instance": null,
                "source_component_parameter": null,
                "target_component_instance": "catiav52enf",
                "target_component_parameter": "inputfile"
            },
            {
                "source_component_instance": "catiav52enf",
                "source_component_parameter": "outputfile",
                "target_component_instance": "copy_to_cifs",
                "target_component_parameter": "inputfile"
```


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```
                },
                {
                    "source_component_instance": "copy_to_cifs",
                    "source_component_parameter": "outputfile",
                    "target_component_instance": "mail",
                    "target_component_parameter": "inputfile"
                },
                {
                    "source_component_instance": "mail",
                    "source_component_parameter": "outputfile",
                    "target_component_instance": null,
                    "target_component_parameter": null
                }
            ]
        }
    ],
    "component_templates": [
            *1
    ],
    "components": [
            *2
    ]
}
```

*1: This section can be removed when not specifying Component templates. Please refer to [12.6.5, “Importing Component Templates”] for the details about Component Templates.
*2: This section can be removed when not specifying Custom Components. Please refer to [12.6.6, “Importing Custom Components”] for the details about Custom Components.

You can also import Scenarios from "Scenario List" page. Click [Import] button, and specify a JSON file to upload in the dialog. A notification message will be displayed at the top of the page once successfully uploaded.

12.6.5. Importing Component Templates

Run "<installation-path>\k2dashboard\start-console.bat" and run the following command and specify the file path to JSON file in the opened command line interface to import Component Templates for ASFALIS TransServer.
Command:

```
bundle exec rake ats:component_templates:import
ATS_COMPONENT_TEMPLATES_IMPORT_FILE=C:\path\to\component_templates.json
```

- How to create JSON files
  Create JSON files in the following format and save as "*.json" in any local folder.

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Layer	Node Name	Description	Type	Mandatory
1	format_version	Specify 1.	int	Yes
1	component_templates	-	array of object	Yes
2	(component_template)	-	object	-
3	unique_alias	Specify the Component Template unique alias (identifier).	string	Yes
3	external_owner	Specify the name of the external system connected to ASFALIS TransServer.	string	-
3	name	Specify the name of Component Template. Please ensure to specify at least for one locale name when registering new Component Template.	object	Yes
4	$(locale_name)	-	string	*1
3	description	Specify the description of Component Template.	object	-
4	$(locale_name)	-	string	*1
3	component_internal_name	Specify the internal name of the Component Template.	string	Yes
3	parameters	Specify parameters and their values for the Component. Leave this blank to set no parameters.	array of object	*2
4	(parameter)	-	object	-

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Layer	Node Name	Description	Type	Mandatory
5	key_name	Specify the parameter to use by its key name.	string	*2
5	value	Specify the parameter value. Value type differs depending on the parameter.	-	
5	is_mandatory	Specify whether to enable "Users must set this parameter" by "true" or "false".	boolean	
5	is_editable	Specify whether to enable "specified later, when a Job is registered" by "true" or "false".	boolean	
5	is_visible	Specify whether to enable "Visible for User" by "true" or "false".	boolean	
3	sub_component_instances	Specify the Sub-Component.	array of object	*3
4	(sub_component_instance)	-	object	-
5	sub_process_name	Specify the sub process by its name. Sub process name consists of "<Component name>_<sub process name>", and please write the sub process name only for this.	string	*3
5	parameters	Specify parameters and their values for the Sub-Component. Leave this blank to set no parameters.	array of object	
6	(parameter)	-	object	-

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Layer	Node Name	Description	Type	Mandatory
7	key_name	Specify the parameter to use by its key name.	string	
7	value	Specify the parameter value. Value type differs depending on the parameter.	-	
7	is_mandatory	Specify whether to enable "Users must set this parameter" by "true" or "false".	Boolean	*3
7	is_editable	Specify whether to enable "specified later, when a Job is registered" by "true" or "false".		
7	is_visible	Specify whether to enable "Visible for User" by "true" or "false".		

*1: Replace "$(locale_name)" with locale names such as "ja-JP", "en-US", "de-DE", and "zh-CN".
*2: This is mandatory when specifying a Component that has mandatory parameters.
*3: This is mandatory when specifying "Simplification" or "Polygon Optimizer" Component.

Below is a sample JSON file

```
{
    "format_version": 1,
    "component_templates": [
        {
            "unique_alias": "ComponentTemplate_1",
            "external_owner": "CN=ComponentTemplate_1,DC=example,DC=com",
            "name": {
                "ja-JP": "コンポーネントテンプレート1",
                "en-US": "ComponentTemplate_1"
            },
            "description": \{
                "ja-JP": "これはコンポーネントテンプレート1です",
                "en-US": "This is ComponentTemplate_1"
            },
            "component_internal_name": "mail",
            "parameters": [
                {
                    "key_name": "from",
                    "value": "",
                    "is_mandatory": true,
                    "is_editable": true,
                    "is_visible": true
                },
```

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```
                {
                    "key_name": "to",
                    "value": "",
                    "is_mandatory": false,
                    "is_editable": true,
                    "is_visible": true
                },
                {
                    "key_name": "subject",
                    "value": "",
                    "is_mandatory": true,
                    "is_editable": true,
                    "is_visible": true
                },
                {
                    "key_name": "body",
                    "value": "test message",
                    "is_mandatory": true,
                    "is_editable": true,
                    "is_visible": true
                }
            ]
        },
        {
            "unique_alias": "ComponentTemplate_2",
            "external_owner": "CN=ComponentTemplate_2,DC=example,DC=com",
            "name": {
                "ja-JP": "コンポーネントテンプレート2",
                "en-US": "ComponentTemplate_2"
            },
            "description": {
                "ja-JP": "これはコンポーネントテンプレート2です",
                "en-US": "This is ComponentTemplate_2"
            },
            "component_internal_name": "simplify",
            "parameters": [],
            "sub_component_instances": [
                {
                    "sub_process_name": "removeroundhole",
                    "parameters": [
                        {
                            "key_name": "AvoidInterferenceWithinPart",
                            "value": "1",
                            "is_mandatory": false,
                            "is_editable": true,
                            "is_visible": true
                        },
                        {
                            "key_name": "HolePenetrationType",
```


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```
                            "value": "1",
                            "is_mandatory": false,
                            "is_editable": true,
                            "is_visible": true
                        }
                    ]
                }
            ]
        }
    ]
}
```

12.6.6. Importing Custom Components

Run "<installation-path>\k2dashboard\start-console.bat" and run the following command and specify the file path to JSON file in the opened command line interface to import custom Components for ASFALIS TransServer.
Command:

```
bundle exec rake ats:components:import
ATS_COMPONENTS_IMPORT_FILE=C:\path\to\components.json
```

- How to create JSON files
  Create JSON files in the following format and save as "*.json" in any local folder.

Layer	Node Name	Description	Type	Mandatory
1	format_version	Specify 1.	int	Yes
1	components	-	array of object	Yes
2	(component)	-	object	-
1	components	-	array of object	-
2	(component)	-	object	-
3	internal_name	Specify the internal name of the Custom Component.	string	Yes
3	external_owner	Specify the name of the external system connected to ASFALIS TransServer.	string	-

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Layer	Node Name	Description	Type	Mandatory
3	execution_type	Specify; - 1: For cases other than value "2" - 2: To run script Component	int	Yes
3	component_type_id	Specify the Component type from the following three options; - 1: Translates CAD files to intermediate files - 2: Translates intermediate file to CAD files - NULL: Others	int	-
3	order	Specify the display order of the Custom Component. (This will be used when displaying Components in the list.) "The largest number among currently registered Components + 1" will be set automatically when nothing is specified.	int	-
3	is_enabled	Specify whether to enable this Component by "true" or "false". "true" will be automatically set when nothing is specified.	boolean	-
3	name	Specify the Custom Component name. Please ensure to specify at least one locale name when registering new Custom Components.	object	-
4	$(locale_name)	-	string	*1
3	description	Specify the description of the Custom Component.	object	-
4	$(locale_name)	-	string	-
3	input_parameters	Specify the inputs to this Custom Component.	array of object	-
4	(input_parameter)	-	object	-
5	key_name	Specify the parameter to use by its key name.	string	Yes
5	name	Specify the parameter name. Please ensure to specify at least one locale name when registering new Custom Components.	object	-

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Layer	Node Name	Description	Type	Mandatory
6	$(locale_name)	-	string	*1
5	description	Specify the description of the parameter.	object	-
6	$(locale_name)	-	string	-
5	is_mandatory	Specify whether this parameter is mandatory. "false" will be automatically set when nothing is specified.	boolean	-
5	mime_type	Specify the MIME_TYPE of this parameter. "NULL" will be automatically set when nothing is specified.	string	-
5	value_constraint_id	Specify the constraint on this parameter by its ID if necessary. "NULL" will be automatically set when nothing is specified.	int	-
5	value_type	Specify the parameter type by the following value_type name; - "number" - "text" - "textarea" - "radiobutton" - "file" - "pulldown"	string	-
5	values	Specify the information of the parameter value in array.	array of object	-
6	(value)	-	object	-
7	value	Specify the value options of this parameter.	array of object	Yes
7	description	Specify the description of the parameter value. Please ensure to specify at least one locale name when registering new Custom Components.	object	-
8	$(locale_name)	-	string	*1
7	is_enabled	Specify whether to enable this Component parameter by "true" or "false". "true" will be automatically set when nothing is specified.	boolean	-

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*1: Replace "$(locale_name)" with locale names such as "ja-JP", "en-US", "de-DE", and "zh-CN".

Below is a sample JSON file

```
{
    "format_version": 1,
    "components": [
        {
            "internal_name": "CustomComponent_1",
            "execution_type": 3,
            "component_type_id": null,
            "order": 111,
            "is_enabled": true,
            "external_owner": "CN=CustomComponent_1,DC=example,DC=com",
            "name": {
                "ja-JP": "カスタムコンポーネント1",
                "en-US": "CustomComponent_1"
            },
            "description": {
                "ja-JP": "これはカスタムコンポーネント1です",
                "en-US": "This is CustomComponent_1"
            },
            "input_parameters": [
                {
                    "key_name": "input_file",
                    "name": {
                        "en-US": "File of translation",
                        "ja-JP": "変換対象モデルファイル"
                    },
                    "description": {
                        "en-US": "File of translation",
                        "ja-JP": "変換対象モデルファイル"
                    },
                    "value_type": "file",
                    "is_mandatory": true,
                    "mime_type": "application/octet-stream"
                }
            ],
            "output_parameters": [
                {
                    "key_name": "output_file",
                    "name": {
                        "en-US": "Executing result file",
                        "ja-JP": "変換後モデルファイル"
                    },
                    "description": {
                        "en-US": "Executing result file",
                        "ja-JP": "変換後モデルファイル"
```

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```
                    },
                    "value_type": "file",
                    "is_mandatory": true,
                    "mime_type": "application/octet-stream"
                }
            ],
            "log_parameters": [
                {
                    "key_name": "log_file",
                    "name": {
                        "en-US": "Log File",
                        "ja-JP": "変換ログファイル"
                    },
                    "description": {
                        "en-US": "Log File",
                        "ja-JP": "変換ログファイル"
                    },
                    "value_type": "file",
                    "is_mandatory": true
                },
                {
                    "key_name": "status_file",
                    "name": {
                        "en-US": "Status File",
                        "ja-JP": "ステータス出力ファイル"
                    },
                    "description": {
                        "en-US": "Status File",
                        "ja-JP": "ステータス出力ファイル"
                    },
                    "value_type": "file",
                    "is_mandatory": true
                }
            ],
            "component_parameters": [
                {
                    "key_name": "output_file_name",
                    "name": {
                        "en-US": "Executing result file name",
                        "ja-JP": "変換後モデルファイル名"
                    },
                    "description": {
                        "en-US": "Specify executing result file name",
                        "ja-JP": "変換後モデルファイル名を指定します"
                    },
                        "value_type": "text",
                        "is_mandatory": true
                    },
                    {
```

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```
                        "key_name": "input_format_name",
                        "name": {
                            "en-US": "Input format name",
                            "ja-JP": "入力フォーマット名"
                        },
                        "description": {
                            "en-US": "Specify input format name",
                            "ja-JP": "入力フォーマット名を指定します"
                        },
                        "value_type": "text"
                    },
                    {
                        "key_name": "SlaveNodeName",
                        "name": {
                            "en-US": "Slave Node Name",
                            "ja-JP": "Slave Node指定"
                        },
                        "description": {
                            "en-US": "Specify machine name and port number of the
Slave Node where Component is executed; input \"(machine_name):(port_number)\"",
                            "ja-JP": "コンポーネントを実行するSlave
Nodeのマシン名とポート番号を指定します。\"(マシン名):(ポート番号)\"を入力。"
                        },
                        "value_type": "text"
                    },
                    {
                        "key_name": "output_format_name",
                        "name": {
                            "en-US": "Output format name",
                            "ja-JP": "出力フォーマット名"
                        },
                        "description": {
                            "en-US": "Specify output format name",
                            "ja-JP": "出力フォーマット名を指定します"
                        },
                        "value_type": "pulldown",
                        "is_customized": true,
                        "values": [
                            {
                                "value": "application/proe",
                                "description": \{
                                "en-US": "proe",
                                "ja-JP": "proe"
                            },
                            "is_enabled": true
                        },
                        {
                            "value": "application/inventor",
                            "description": {
```

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```
                            "en-US": "inv",
                            "ja-JP": "inv"
                        },
                        "is_enabled": true
                    }
                ]
            },
            {
                "key_name": "exc_opt_param1",
                "name": {
                    "en-US": "PARAM1",
                    "ja-JP": "PARAM1"
                },
                "description": {
                    "en-US": "description of PARAM1",
                    "ja-JP": "PARAM1の説明です"
                },
                "value_type": "text"
            },
            {
                "key_name": "exc_opt_param2",
                "name": {
                    "en-US": "PARAM2",
                    "ja-JP": "PARAM2"
                },
                "description": {
                    "en-US": "description of PARAM2",
                    "ja-JP": "PARAM2の説明です"
                },
                "value_type": "text"
            },
            {
                "key_name": "exc_opt_param3",
                "name": {
                    "en-US": "PARAM3",
                    "ja-JP": "PARAM3"
                },
                "description": {
                    "en-US": "description of PARAM3",
                    "ja-JP": "PARAM3の説明です"
                },
                "value_type": "text"
            },
            {
                "key_name": "custom_param1",
                "name": {
                    "en-US": "CUSTOM PARAM1",
                    "ja-JP": "CUSTOM PARAM1"
                },
```


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```
                    "description": {
                        "en-US": "description of CUSTOM PARAM1",
                        "ja-JP": "CUSTOM PARAM1の説明です"
                    },
                    "value_type": "text"
                },
                {
                    "key_name": "custom_param2",
                    "name": {
                        "en-US": "CUSTOM PARAM2",
                        "ja-JP": "CUSTOM PARAM2"
                    },
                    "description": {
                        "en-US": "description of CUSTOM PARAM2",
                        "ja-JP": "CUSTOM PARAM2の説明です"
                    },
                    "value_type": "text"
                }
            ]
        }
    ]
}
```

12.7. Export

This is a function to export various information used in ASFALIS TransServer by JSON format via command line interface. (Some can be set from the ASFALIS TransServer user interface [Administration].)
Exported JSON format will be in the same format as the ones to import.

12.7.1. Exporting Users

Run "<installation-path>\k2dashboard\start-console.bat". Run the following command and specify the file path in the opened command line interface to export Users from ASFALIS TransServer. The language priority settings for each User will also be exported. Please note that the language priority settings of ASFALIS TransServer will be used instead as the default value when it is not set.
Command:

```
bundle exec rake ats:users:export ATS_USERS_EXPORT_FILE=C:\path\to\users.json
INCLUDE_GROUP=TRUE
```

"INCLUDE_GROUP" is optional. It will be regarded as "INCLUDE_GROUP=FALSE" when not specified.
You can also export Users from the user interface.
Select any Users in "User List" page ([Administration] > [User Administration]), and then click

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[Export] button.

12.7.2. Exporting Groups

Run "<installation-path>\k2dashboard\start-console.bat". Run the following command and specify the file path in the opened command line interface to export groups from ASFALIS TransServer.
Command:

```
bundle exec rake ats:groups:export ATS_GROUPS_EXPORT_FILE=C:\path\to\groups.json
```

Please note that default groups such as Administrators and ScenarioAdmins will not be included in the exported JSON file.

12.7.3. Exporting Scenarios

Run "<installation-path>\k2dashboard\start-console.bat". Run the following command and specify the file path in the opened command line interface to export Scenarios from ASFALIS TransServer.
Command:

```
bundle exec rake ats:scenarios:export
ATS_SCENARIOS_EXPORT_FILE=C:\path\to\scenarios.json
```

Specify the Scenarios by their IDs (ID_LIST) and unique aliases (UNIQUE_ALIAS_LIST) to export specific Scenarios only. (You can use either or both.) Otherwise, all Scenarios will be exported.
Command:

```
bundle exec rake ats:scenarios:export
ATS_SCENARIOS_EXPORT_FILE=C:\path\to\scenarios.json ID_LIST="1,2,3"
```

```
bundle exec rake ats:scenarios:export
ATS_SCENARIOS_EXPORT_FILE=C:\path\to\scenarios.json
UNIQUE_ALIAS_LIST="Scenario_1,Scenario_2"
```

You can also export Scenarios from the user interface.
Select any Scenarios in "Scenario List" page ([Administration] > [Scenario Administration]), and then click [Export] button.

When a Scenario to export contains "File" type parameters, a new folder will be created under "k2dashboard" folder, and those uploaded parameter files will also be exported to that folder. For example, when "sample.rb" file is uploaded as ENF Editor Ruby script file (scriptfile_upload) for ENF Editor Component (Component internal name: enfeditor) used in the Scenario

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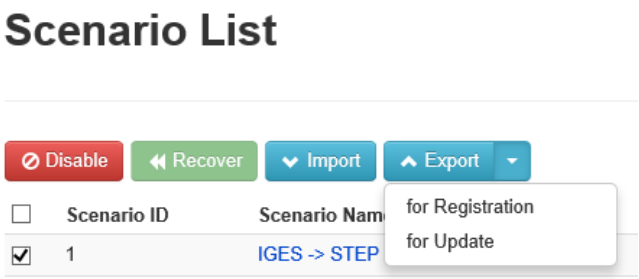
(Scenario unique alias: Scenario1),
Path:

```
k2dashboard\Scenario1_enfeditor_scriptfile_upload\sample.rb
```

You can also select the output type by the purpose, either to register Scenarios to ASFALIS TransServer in another environment, or to update Scenarios.
Select from the pull-down menu from [Export] button when exporting from the browser.



Specify "UPDATE_MODE=true" when exporting from the command line interface. It is set to "false" by default.

> Hint)
> "Export for Registration" is useful to transfer Scenarios from one ASFALIS TransServer environment to another one.
> "Export for Update" is useful to update Scenarios all together.

12.7.4. Exporting Component Templates

Run "<installation-path>\k2dashboard\start-console.bat". Run the following command and specify the file path in the opened command line interface to export Component Templates from ASFALIS TransServer.
Specify the Component Templates by their unique aliases (UNIQUE_ALIAS_LIST) to export specific Component Templates only. Otherwise, all Component Templates will be exported.
Command:

```
bundle exec rake ats:component_templates:export
ATS_COMPONENT_TEMPLATES_EXPORT_FILE=C:\path\to\component_templates.json
UNIQUE_ALIAS_LIST="ComponentTemplate_1,ComponentTemplate_2"
```

When a Component Template to export contains "File" type parameters, a new folder will be created under "k2dashboard" folder, and those uploaded parameter files will also be exported to that folder. For example, when "sample.rb" file is uploaded as ENF Editor Ruby script file (scriptfile_upload) for ENF Editor Component (Component internal name: enfeditor) used in the Component Template (Component Template unique alias: Template1), file path would be;

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```
k2dashboard\Template1_enfeidtor_scriptfile_upload\sample.rb
```

12.7.5. Exporting Custom Component

Select any Components to export in "Component List" page ([Administration] > [Component Administration]). Then, run "<installation-path>\k2dashboard\start-console.bat", run the following command and specify the file path in the opened command line interface to export Custom Components from ASFALIS TransServer.

Specify the Custom Components by their internal names (INTERNAL_NAME_LIST) to export specific Custom Components only. Otherwise, all Custom Components will be exported. Command:

```
bundle exec rake ats:components:export
ATS_COMPONENTS_EXPORT_FILE=C:\path\to\components.json
INTERNAL_NAME_LIST="CustomComponent_1, CustomComponent_2"
```

12.8. ASFALIS TransServer-Related Processes

ASFALIS TransServer runs multiple "ruby.exe" processes in the background as follows.

Role	Description	Number of "ruby.exe" processes
Rails	Application server	Three times of the number of "Rails" (3 for each "Rails")
MasterController	Monitor and manage each process	2
QueueController	Manage the status of Job assignment	2
MiscWorker	Delete backup files and/or unnecessary files etc.	2
ScriptComponent	Run script Components	4
PerSlavenodeWorker	Communicate with Slave Nodes	Two times of the number of "Slave Node" (2 for each Slave Node)
KLoggr	Record logs	2
K2server	Calculate usage statistics etc.	1

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Role	Description	Number of "ruby.exe" processes
Script to start ASFALIS TransServer	Run script to start ASFALIS TransServer	2

Three instances of "Rails" are run by default, which means nine processes of "ruby.exe" are running in the background, and as the number of "Rails" and/or "Slave Node" increases, the number of "ruby.exe" processes increases.
All these processes are necessary, and it does not affect the system performance that the large number of processes are running. Below is a sample case when there are three Salve Nodes.

Rails	9 (3 x 3)
MasterController	2
QueueController	2
MiscWorker	2
ScriptComponent	4
PerSlavenodeWorker	6 (3 x 2)
KLoggr	2
K2server	1
Script to start ASFALIS TransServer	2
Total	**30**

12.9. Others

To register parameters for Custom Components, the conventional method using CSV files (which was officially supported in EX6.1 or earlier) is also supported. (Since EX7.0, it is recommended to register using JSON file.)

12.9.1. Registering Parameters Using CSV Files

1. Register parameters using following three CSV files. Please ensure to set the encoding to UTF-8 BOM.
    - components.csv
    - abstract_component_parameter_relations.csv
    - component_parameters.csv

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2. Create a subfolder in the following folder with any name, and place the CSV files there.
   <ATS Install Directory>\k2dashboard\db\seed\custom\
3. Run "<ATS installation folder>\k2dashboard\start-console.bat" and run the following command in the opened command line interface to import CSV files. Please ensure that ASFALIS TransServer is stopped before running this command.
   Command:

   ```
   bundle exec rake db:load_csv CSV_FOLDER=db/seed/custom/<folder path to CSV files>/
   ```

Sample CSV files are available in the following folder.

- <ATS Sample Directory>\custom_component

Please prepare CSV file in the following format.

- **components.csv**

$internal_name	Specify the name of the custom Component (how it will be displayed as on the page to register/edit Scenarios of ASFALIS TransServer) The name displayed on "Job editing/detail" page will be <$internal_name> and the suffix added as necessary.
has_sub_components	Specify "FALSE"
execution_type	Specify "1"
&component_type_id#ComponentType @internal_name>id	Specify the null value (leave the cell empty)
Order	Specify any value, which will decide the order in the Component list for registering/editing Scenarios. The smallest number will come to the top.
name@"Locale Name"	Specify the Component name in locale language. This will be used in Scenario building/editing page and Job making/information page.
description@"Locale Name"	Specify the description of the Component in locale language. This will be used in Job making (pop up window) and detail page.
has_through_io	Specify FALSE.

Locale Name: Specify "en-US", "ja-JP", "de-DE", and "zh-CN".

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- **abstract_component_parameter_relations.csv**

$component_parameter_id#ComponentParameter @internal_name>id	Specify a unique internal name.
component_type	Specify the Component
component_id#component_type@internal_name>id	Specify the custom Component by the name specified in <components.csv>.

- **component_parameters.csv**

$internal_name	Specify a unique internal name. Note that this will not be used to show on the screen
key_name	Specify the name of the internal key Make sure that you specify the same character string as you did in CMP file.
io_type	Specify one of the parameters below 1. for the input files of Components This parameter will have an impact on the following items. ◦ Judges accessibility of a Component on Scenario creation/edit page. ◦ Filters against selection file on Job entry page. 2. for the output files of the Components This parameter will have an impact on the following items. ◦ Judges accessibility of a Component on Scenario creation/edit page. ◦ Controls batch download and output file summary on "Job Detail" page. 3. for the parameter which will be given to Components as Job information. The value will be shown as configuring parameters on the Scenario registration/edit page. 4. for the log files of Component ◦ Controls log file field and batch download on "Job Detail" page.

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value_type	Specify according to io_type 8: when io_type is 1, 2 or 4 2: when io_type is 3 and you create parameter file in text format 8: when io_type is 3 and you create parameter file in other format
is_mandatory	TRUE: when io_type is 3 and the parameter is mandatory - Checkbox for "Configure" will be kept "ON" under this condition FALSE: when io_type is 3 and the parameter is not mandatory
order	Specify any parameter This changes the order to show the parameters. The one with the smallest number comes to the top.
is_multiple	Specify FALSE
&mime_type_id#MimeType@name>id	Specify the file format when value_type is 8. Select the value from the "$name" column in <ASFALIS TransServer Install Directory>\k2dashboard\db\seed\mime_types.csv This value will be used: * To specify the file format when value_type is 8 * To judge Component accessibility when io_type is 1 or 2
&value_constraint_id#ValueConstraint @internal_name>id	Specify the constraint against the parameter when io_type is 3. Select the value from the "$internal_name" column in <ASFALIS TransServer Install Directory>\k2dashboard\db\seed \value_constraints.csv Specify null value or leave this section blank when there is no constraint against the parameter.
name@"Locale Name"	Specify the Component name in locale language. This will be used in Scenario building/editing page and Job making/information page.
description@"Locale Name"	Specify the description of the Component in locale language. This will be used in Job making (pop up window) and detail page.

Locale Name: Specify "en-US", "ja-JP", "de-DE", and "zh-CN".

12.9.2. Specifying Slave Node to Execute Components

We explain how to prepare parameters to specify which Slave Node to execute custom Components on.
Add a parameter to "component_parameter.csv" which you have created to register parameters and custom Components to ASFALIS TransServer. The parameter to add is the one whose key_name is "SlaveNodeName." You can specify Slave Node to use by its machine name and the port number.

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You will find a sample under
<ASFALIS TransServer Sample Directory>\custom_component_fixed_slavenode

12.9.3. Registering Report Files

This section explains how to customize Custom Components to register output report files (hereafter "report files") which are in HTML and XML formats and viewable on Web browsers, and view them within ASFALIS TransServer.

- How to Register Report Files to Slave Nodes
  1. Customize the Custom Component to export "report.txt" which defines the files to consist the report file (exported by that Custom Component) by the relative paths from the work folder. "report.txt" should list the root (\) file in the first line, and others from the second line.
  2. Create a *.cmp file, and specify an absolute file path to "report.txt" with "reportfile_filename".
     This parameter name can be changed. In that case, please ensure that the parameter name is concatenated the key name of the report file parameter in "component_parameters.csv" with "_filename".

Please refer to [9.2, “Custom Component”] for the details about the Custom Components.

- Sample "report.txt" file

```
index.html
sample.css
sample.js
images/A1.png
images/A2.jpeg
sub/sub.html
```

- How to Register Parameters to ASFALIS TransServer

  Register "reportfile" parameters. Below are the details about the parameters used specifically for "reportfile". Please refer to [12.9.1, “Registering Parameters Using CSV Files”] for the details about the standard parameter.

- component_parameters.csv

$internal_name	Specify a unique internal name. This name will not be displayed in the user interface of ASFALIS TransServer.

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key_name	Specify "reportfile". You can also specify other string. In that case, please ensure that the key to specify the file path to "report.txt" in *.cmp file (key name is "reportfile_filename" by default) is concatenated this value with "_filename".
io_type	Always specify "4".
value_type	Always specify "21".
is_mandatory	Always specify "FALSE".
is_multiple	Always specify "FALSE".
&mime_type_id#MimeType @name>id	Always specify "application/octet-stream".
&value_constraint_id#Value Constraint @internal_name>id	Specify an empty string.

- abstract_component_parameter_relations.csv

  Add "reportfile" parameters. Please refer to [12.9.1, “Registering Parameters Using CSV Files”] for how to register parameters to ASFALIS TransServer. Sample files are available in the following folder;
  <ASFALIS TransServer Sample Directory>\custom_component_reportfile

  For the security reason, please ensure that all the strings input to Custom Component by Users are sanitized properly when they will be embedded into output report files, so that Custom Component escapes all the strings embedded into output report files and the Web browsers do not treat them as scripts.

  Otherwise, malicious scripts could be embedded into a model, which will be executed when the report is opened in ASFALIS TransServer to access to the information inside ASFALIS TransServer etc. (XSS vulnerability)

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