



APPENDIX **B**

Working with Templates and Data Files

This appendix describes how to use templates and data files with ISC policies and service requests. It contains the following sections:

- [Overview, page B-1](#)
- [Using Templates with ISC Policies, page B-4](#)
- [Using Templates with Service Requests, page B-8](#)



Note

For an overview of the Template Manager and how templates and data files are created in ISC, see Chapter 6, “Service Design” and Appendix D, “Template Usage” in the [Cisco IP Solution Center Infrastructure Reference, 5.1](#).

Overview

ISC’s Template Manager allows you to create, manage, and store templates and associated data files. The purpose of using templates is to provide a means to download free-form CLIs to a device, in order to deploy commands and configurations not normally supported by ISC. Templates are written in the Velocity Template Language and are generally comprised of IOS (and IOS XR) device CLI configurations. Optionally, you can set variables (also defined in Velocity) that are substituted with data stored in data files. The template and data file information is downloaded to the device at the time of service activation. The information in this appendix assumes the templates (including subtemplates, if applicable) and (optional) data files have been set up.



Note

You can also create data files “on demand” during service request creation, as covered in later sections of this appendix.

This overview section covers the following topics:

- [Summary of Template Manager Features, page B-1](#)
- [Template and Data File Workflow, page B-3](#)

Summary of Template Manager Features

This section highlights key features of template and data file support in ISC, especially those that have an impact on working with policies and service requests.

Template Attributes

The ISC template mechanism allows you to differentiate templates by specifying (optional) attributes on a template, including:

- Device type
- Line card type
- Port type
- Software version (IOS or IOS XR)

These attributes are set through a drop-down list when setting up the template in Template Manager. ISC uses these attributes to automatically select the template/data file that most closely matches the device defined within the service request. See the section [Using Templates with Service Requests, page B-8](#), for additional information.

Associating Templates at the Policy Level

ISC supports the association of templates and data files in policies.

Enhanced Subtemplate Support

A new attribute in the Template Editor allows subtemplates to be associated with a template. ISC supports dynamic instantiation of subtemplates based on device attributes. While creating the subtemplates, values for these identifiers must be provided by the operator.

Dynamic Data File Creation

The user can create a data file during service request creation and associate it to the template copied from the associated policy. This functionality extends data file creation from the Template wizard to doing so directly from the service request wizard Template Association screen. In addition, you can modify any or all variables that are part of the template/data file attached to a service request and apply the updated template/data file without removing the entire service.

Automatic Application of Negate Templates

To remove a configuration created from a template/data file, a negate template must be applied to the existing service. This is no longer a manual process in ISC. You create both the positive and negate template. You can assign a positive template/data file to a policy. ISC calls the appropriate negate template at the appropriate time, as the negate template has a direct relationship with the deploy template. ISC determines which negate template to use, based on the service request action requested (for example, deploying or decommissioning a service). The negate template has the same name as the template, with the addition of the suffix `.Negate`. The negate template does not share the data file of the deploy template. The negate template must have its own data file defined.

Compatibility of the Template Mechanism with Previous ISC Releases

ISC maintains compatibility with the template mechanism in previous ISC releases. Templates created in earlier versions of ISC work “as is,” without any modifications to the templates or the workflow. In the case of a policy in the system that was created in an earlier ISC release, the GUI workflow for associating templates/data files is not visible. In such a case, the operator adds the template and data files during service deployment, as in previous releases of ISC.

Template Support for IOS and IOS XR

The template mechanism is supported for both IOS and IOS XR devices. For IOS XR devices, the configlet generated from templates/data files contains CLI commands and not XML statements. For IOS XR devices, template support is provided as CLI commands. For IOS devices, the operator can download a template configlet using the device console.

RBAC Support for Template Usage

Templates and data files are only accessible to users with the proper RBAC role. A permission type for data files has been added. The permissions allowed for the data files are view, create, modify, and delete. Operators cannot view templates/data files assigned to other roles, and are not permitted to deploy templates/data files to which they do not have access. See the [Cisco IP Solution Center Infrastructure Reference, 5.1](#) for more information on RBAC support for templates/data files.

Template Variables

Template variables support most ISC repository variables for MPLS, L2VPN, VPLS, and FlexUNI/EVC. For a list of supported template variables, see the “Devices” chapter of the [Cisco IP Solution Center Infrastructure Reference, 5.1](#).

Importing and Exporting Templates

ISC provides a mechanism to import and export templates and data files. See the [Cisco IP Solution Center Infrastructure Reference, 5.1](#) for more information.

Template and Data File Workflow

This section summarizes the basic operations involved in setting up and using templates, data files, and negate templates in ISC.

Basic Template Manager Functions

- Create templates and negate templates for different configurations.
- Specify device attributes for the templates.
- Associate subtemplates to templates, if applicable
- Create data files for the subtemplates.
- Create a negate template for each subtemplate.
- Create data files for the negate templates.
- Create a super template and attach subtemplates to it.

These basic Template Manager functions are documented in the [Cisco IP Solution Center Infrastructure Reference, 5.1](#). See that guide for more information on these tasks.

Policy-Level Template Functions

- Create a policy and enable template support for the policy.
- Associate templates and (optionally) data files to the policy, if desired.

For information on how to associate templates and data files at the policy level, see the section [Using Templates with ISC Policies, page B-4](#), in this appendix.

Service Request-Level Template Functions



Note

When a policy is only associated with a template and no data file, then during creation of a service request using that policy, automatic selection of a data file for that template takes place, if the template has only one data file. If the template does not have a data file, then one must be created for that template and associated to the service request before saving is permitted.

- Create a service request and associate template(s) to a link.
- Deploy the service request on a device (for example, a 7600).
- The subtemplate and corresponding data file for the 7600 are autoselected for deployment.
- A configlet is generated from the subtemplate.
- Decommission the service request.
- The negate template for the subtemplate is autoselected and deployed.

For information on how to use templates and data files in service requests, see the section [Using Templates and Data Files with Service Requests, page B-12](#), in this appendix.

Using Templates with ISC Policies

This section provides information on how to enable template support and associate templates/data files with ISC policies. It contains the following sections:

- [Overview of Template Support in ISC Policies, page B-4](#)
- [Associating Templates and Data Files to a Policy, page B-4](#)

Overview of Template Support in ISC Policies

ISC supports associating templates/data files to a service policy. This minimizes steps in the provisioning workflow and also reduces potential errors that can occur if an incorrect template/data file is selected during service creation. In the Policy Editor workflow, after the policy attributes are set, a new Templates Association window appears. The Enable Templates check box that appears in this window allows you to enable template association for the policy and to specify templates/data files to be available for service requests based on the policy. More than one template/data file can be associated to the policy. Each template/data file can be associated to a device role. The available device roles are determined by the policy type. Later, at the time of service request creation, templates are only available if the device type matches the type specified for the template within the policy.

**Note**

In the case of older policies that were created before ISC 5.1, the previous method of supporting templates in policies is maintained for backward compatibility.

Associating Templates and Data Files to a Policy

This section describes how to associate templates and data files to an ISC policy. These features also apply in the case of editing a policy.

After the policy attributes are set for a policy, the Template Association window appears in the workflow, as shown in [Figure B-1](#).

Figure B-1 *Template Association Window*

The screenshot shows a window titled "Template Association" with a table and navigation buttons. The table has two columns: "Attribute" and "Value".

Attribute	Value
Template Enable:	<input type="checkbox"/>

At the bottom of the window, there is a status bar that says "- Step 5 of 5 -" and four buttons: "< Back", "Next >", "Finish", and "Cancel".

This window is where you associate the templates/data files as a final step before clicking the Finish button and saving the policy settings.

Perform the following steps to associate template(s)/data file(s) with the policy.

- Step 1** Check the **Template Enable** check box to enable template use in service requests based on this policy. This check box is unchecked by default.

The GUI updates with fields allowing you to associate templates/data files to the policy, as shown in [Figure B-2](#).

Figure B-2 *Template Association Window with Template Enable Checked*

The screenshot shows the same "Template Association" window, but now the "Template Enable" checkbox is checked. Below the table, there are additional fields for associating templates/data files.

Attribute	Value
Template Enable:	<input checked="" type="checkbox"/>
Associate Template/Datafile(s) :	

Role Type	Template/Data File	Editable
<input type="checkbox"/>		

At the bottom of the window, there are "Add" and "Delete" buttons. The status bar at the bottom says "- Step 5 of 5 -" and has the same navigation buttons as in Figure B-1.

Step 2 Click the **Add** button to add a row in which to specify associated templates/data files.

A new row appears in the GUI, providing fields to set the role type, specify templates/data files, and specify if the template/data file is editable within service requests based on the policy.

Step 3 In the Role Type column, choose a device role from the drop-down list.

The role selections might include:

- N-PE
- PE-AGG
- U-PE
- CE (MULTI_VRF)
- CE (MANAGED)
- MVRF



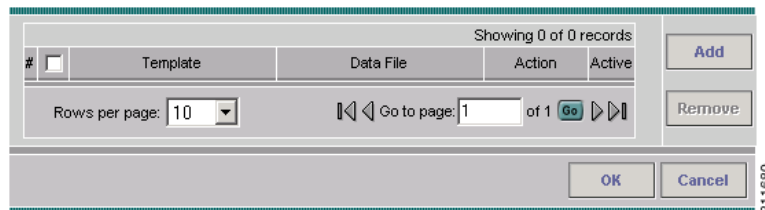
Note

The available device roles in the drop-down list are determined by the policy type.

Step 4 To add a template/data file click the **Add** link in the Template/Data File column.

The Add/Remove Templates window appears, as shown in [Figure B-3](#).

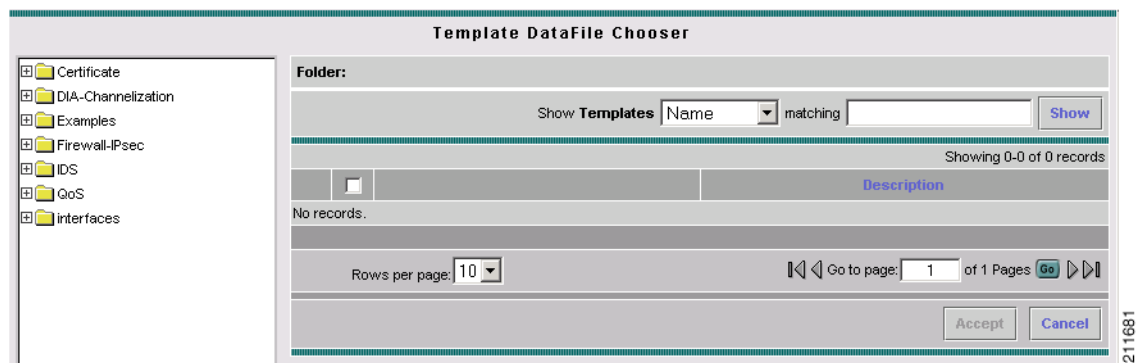
Figure B-3 Add/Remove Template Pop-Up



Step 5 Click the **Add** button to select a template/data file to associate with the policy.

The Template Datafile Chooser window appears, as shown in [Figure B-4](#).

Figure B-4 Template Datafile Chooser Window



This is a standard Template Manager window used to navigate to and choose templates and (optionally) data files in ISC.

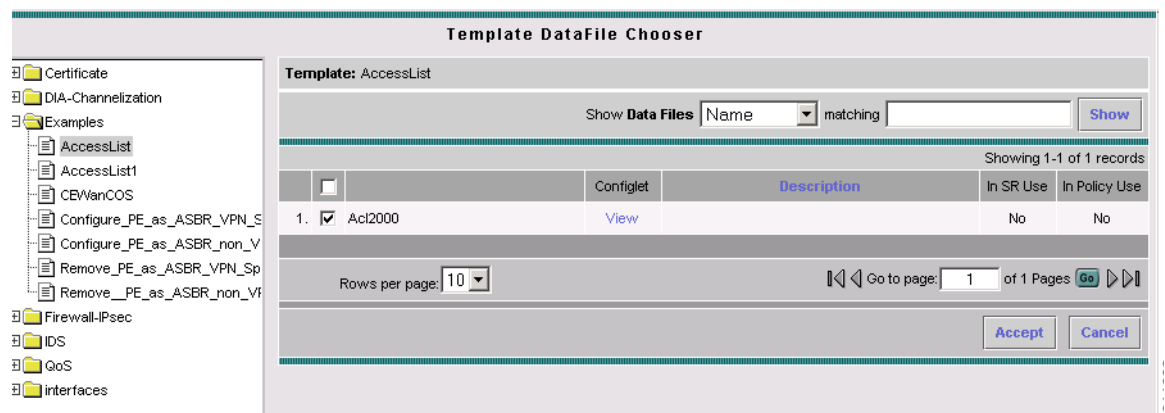
**Note**

The following steps involving the Template Datafile Chooser window assume a familiarity with the functionality of the window. For additional information about Template Manager and how templates and data files are created and managed in ISC, see the *Cisco IP Solution Center Infrastructure Reference, 5.1*. The steps shown here are for example purposes. You must modify the steps as required for your environment. For example, you might want to choose only a template file or both a template file and a data file to associate with the policy. Both scenarios are supported.

Step 6 Navigate to a template in the folder tree and click it to select it.

The template is listed in the right side of the GUI, along with any data files that are associated with it, as shown in [Figure B-5](#).

Figure B-5 Template Datafile Chooser Window with Template and Data File Listed



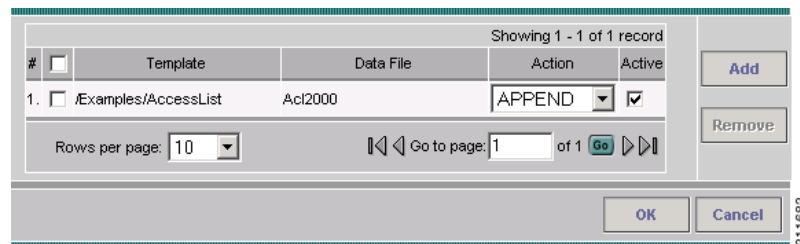
Step 7 Check the check box to the left of a data file name and click the **Accept** button.

**Note**

You can select only the template or both template and data file at this stage, depending on your needs, and whether or not a data file exists for the template.

The Template Datafile Chooser window closes and the selected template/data file appears listed in the Add/Remove Templates window, as show in [Figure B-6](#).

Figure B-6 Add/Remove Templates Window with Template Listed



If you did not choose a data file, then the Datafile column is blank.

Step 8 Check the check box to the left of the template name to choose the template.

- Step 9** Under Action, use the drop-down list and choose **APPEND** or **PREPEND**.
Append tells ISC to append the template-generated CLIs to the regular ISC (non-template) CLIs (configlet). Prepend is the reverse (adds the template to the beginning of the configlet).
- Step 10** Choose **Active** to use this template for service requests based on this policy.
If you do not choose Active, the template is not used.
- Step 11** To associate additional templates/data files with the policy click **Add** in the Add/Remove Templates window and repeat the appropriate steps to add other templates/data files.
- Step 12** To remove a template row from the window, check a template and click the **Remove** button to remove the template from the list.
- Step 13** When you are satisfied with the selections in the Add/Remove Templates window, click **OK**.
The Template Association window appears with the template(s)/data file(s) listed as active link(s). If you have added more than one template/data file, they appear in a comma-separated list of links.
You can click on any link to return to the Add/Remove Templates window, in order to edit/update the template/data file information.
- Step 14** Check the **Edit** check box to make the template/data file attributes editable in service requests based on the policy.
- Step 15** To add additional templates/data files for a given role to the policy, you can click the **Add** button in the Template Association window and repeat the steps outlined above.
- Step 16** To delete templates/data files that have been associated to the policy, check a template/data file to choose it.
Then click the **Delete** button to delete it from the Template Association window.
- Step 17** When you are finished associating the template(s)/data file(s) to the policy, click the **Finish** button in the Template Association window.
The attributes for the policy are saved and the policy creation or modification is complete.
-

Using Templates with Service Requests

This section provides information on templates and data files with a service request. It contains the following sections:

- [Overview of Template Use in Service Requests, page B-8](#)
- [Using Templates and Data Files with Service Requests, page B-12](#)

Overview of Template Use in Service Requests

This section provides overview information about template usage in service requests. It covers the following topics:

- [Associating Templates to a Service Request, page B-9](#)
- [Associating Subtemplates During Service Provisioning, page B-9](#)
- [Creating Data Files During Service Request Creation, page B-10](#)

- [Using Negate Templates to Decommission Template Configurations](#), page B-11
- [Using Templates and Data Files with Service Requests](#), page B-12

For details on how these features are implemented in the ISC GUI, see the section [Using Templates and Data Files with Service Requests](#), page B-12.

Associating Templates to a Service Request

The template mechanism in ISC provides a way to add additional configuration information to a device configuration generated by a service request. To use the template mechanism, the policy on which the service request is based must have been set to enable templates. Optionally, templates and data files to be used by the service request can be specified in the policy. During service request creation, templates/data files can be added to a device configuration if the operator has the appropriate RBAC permission to do so. See the section [Choosing a Template in the Service Request Workflow](#), page B-12 for how to choose templates/data files in the service request workflow.

Associating Subtemplates During Service Provisioning

All templates can be used by other templates as building blocks. The template using other templates is called a super template. The template being used is called a subtemplate. A new attribute in the Template Editor allows subtemplates to be associated with a super template. The super template instantiates all required subtemplates by passing values for the variables in the subtemplate. After instantiation, the super template puts the configlets generated for the subtemplate into the super template. ISC branches templates into subtemplates based on device type, line card type, port type, role type, and software versions. These optional attributes are set while creating the subtemplates. The subtemplates are selected based on the following matching criteria:

- Only exact matches are recognized for the card type and port type attributes. No wild card match is allowed for these attributes.
- Only an exact match is recognized for the device type attribute.
- For the software version attribute, the match is done for a software version equal to the current version, if available. If not, the previous highest version is matched.
- If exact matching attributes are not found, then the match proceeds with the criteria described in [Table B-1](#). An information message listing the exactly matched subtemplates of the super-template is shown if and only if any of the matching criteria are met.
- If none of the attributes are matched, then the default subtemplate is applied.
- If no default subtemplate exists, a subtemplate with all null attribute values is matched.
- If none of the rows specified in the table match, then ISC looks for subtemplates that are marked as device default, or else version default. If no subtemplates are marked as such, then no matching subtemplates are picked. A warning message is displayed.

The matching criteria are summarized in [Table B-1](#).

Table B-1 Default SubTemplate Matching Criteria

Matching Order	Role Type	Device Type	Line Card	Port Type	Software Version
1	Exact Match	Exact Match	Exact Match	Exact Match	Exact Match
2	Exact Match	Exact Match	Exact Match	Exact Match	Previous Highest
3	Exact Match	Exact Match	Exact Match	No Values	Exact Match
4	Exact Match	Exact Match	Exact Match	No Values	Previous Highest
5	Exact Match	Exact Match	No Values	No Values	Exact Match
6	Exact Match	Exact Match	No Values	No Values	Previous Highest
7	Exact Match	Exact Match	No Values	No Values	No Values
8	Exact Match	No Values	Exact Match	Exact Match	Exact Match
9	Exact Match	No Values	Exact Match	Exact Match	Previous Highest
10	Exact Match	No Values	Exact Match	No Values	Exact Match
11	Exact Match	No Values	Exact Match	No Values	Previous Highest
12	Exact Match	No Values	No Values	No Values	Exact Match
13	Exact Match	No Values	No Values	No Values	Previous Highest
14	Exact Match	Default	No Values	No Values	No Values
15	Exact Match	No Values	No Values	No Values	Default
16	Exact Match	No Values	No Values	No Values	No Values

Additional usage notes for subtemplates:

- ISC does not perform checks for the depth of subtemplates. Only one level of subtemplates is supported.
- No validations are done to check if the super template and subtemplate structure is cyclic.
- When the operator attempts to delete a subtemplate that is referenced by a super template, a warning message is generated.
- Subtemplates can be modified.
- Subtemplates can be attached to multiple super templates.
- In the current release, multiple data files are not supported for subtemplates. If multiple data files are found, the service request automatically chooses the first data file (from a list of available data files, sorted alphabetically).

Creating Data Files During Service Request Creation

The operator can create data files “on demand” during service request creation. If template(s) are attached to a service policy, and no data file(s) exist for the template(s), a wizard prompts the operator to enter values for variables. If data file(s) are created on demand during service request creation, it is possible to modify any or all of the variables during modification or re-deployment of the service request.

The service request workflow supports dynamic creation of data files as follows:

- If a template is marked as non-editable in the policy on which the service request is based, the operator cannot edit it during service request creation. However, the name of template and data files are still visible, even though they cannot be modified.
- If a template is marked as editable in the policy, then (assuming appropriate RBAC permission) the operator can change the template/data files during service request creation.
- If a template is associated with a service policy, and at least one data file exists for the template, the operator can select the appropriate data file during service request creation.
- If only one data file exists for the template, it is automatically selected.
- During service request creation, the operator can enter values for template variables.
- Optionally, if no data file exists for the template, the operator can create a new data file during service request creation. When the Datafile Chooser window is opened from Template Association window, a Create Datafile button is provided, which allows the new data file to be created.
- The Create Datafile button is only displayed if the operator has the appropriate RBAC permissions to create a data file.

See the section [Creating a Data File in the Service Request Workflow](#), page B-14 for how to set up a data file in the service request workflow.

Using Negate Templates to Decommission Template Configurations

To remove a configuration created from a template/data file, a negate template must be applied to the existing service. ISC automatically applies the appropriate negate template during the decommission of the service request. For instructions on how to use the ISC Template Manager to create negate templates, see the [Cisco IP Solution Center Infrastructure Reference, 5.1](#).

When a template is associated in a policy or service request, the negate template automatically gets associated. During decommission of the service, the negate template is used for deployment. When decommissioning a service request associated with a template/data file, the negate template is automatically picked up dynamically, by searching for a template name having the name of the original template followed by a suffix `.Negate`. This takes place at deployment time. Negate templates are dynamically instantiated based on the device attributes of the template to which it is associated.



Note

Optional attributes (such as device type, line card type, port type, and software version) applied to a template automatically apply to the corresponding negate template. The optional attributes cannot be applied directly to negate templates.

When a service is decommissioned, the appropriate negate template is deployed. The data file for a negate template is selected during deployment as follows:

- If only one data file is associated with the negate template, the data file is automatically selected.
- If multiple data files are found, the data file with same name as template is selected.
- If multiple data files are found but no data file with the same name exists, the template is skipped.
- If no data file is found, the template is skipped.

The following points cover the behavior of templates in various modification scenarios:

- If you change the template associated with a service request, the negate template automatically changes to the negate template of the newly selected template. In this case, ISC executes the negate template of the previously associated template, as well as the newly associated template.
- When a template or negate template is modified, the service request does not roll back the configuration changes made earlier through the template.
- When a service request is modified, the template command is always deployed.
- When a service request is modified without changing template/data file information, the template commands are not redeployed. The only a modification that triggers a change in template/data file results is the negation of the old template and the addition of new template commands in the device configlet.
- When a device is changed in a service request, the negate template is deployed for the old device, and the template is deployed for the new device.
- When a link in a service request is removed and a new link is added, a negate template is deployed for the deleted link and a template is deployed for the added link.

Using Templates and Data Files with Service Requests

This section describes tasks related to templates, data files, and negate templates that can be performed in the service request workflow. The following tasks are covered:

- [Choosing a Template in the Service Request Workflow, page B-12](#)
- [Creating a Data File in the Service Request Workflow, page B-14](#)
- [Decommissioning Service Requests with Added Templates, page B-15](#)
- [Viewing Templates from the Service Requests Window, page B-16](#)

Choosing a Template in the Service Request Workflow

When creating a service request, the workflow involves selecting a policy on which to base the service request, setting interface and other attributes, and so on. The specific windows and attributes presented in the workflow depend on the type of service request, such as L2VPN, VPLS, MPLS, or FlexUNI/EVC.

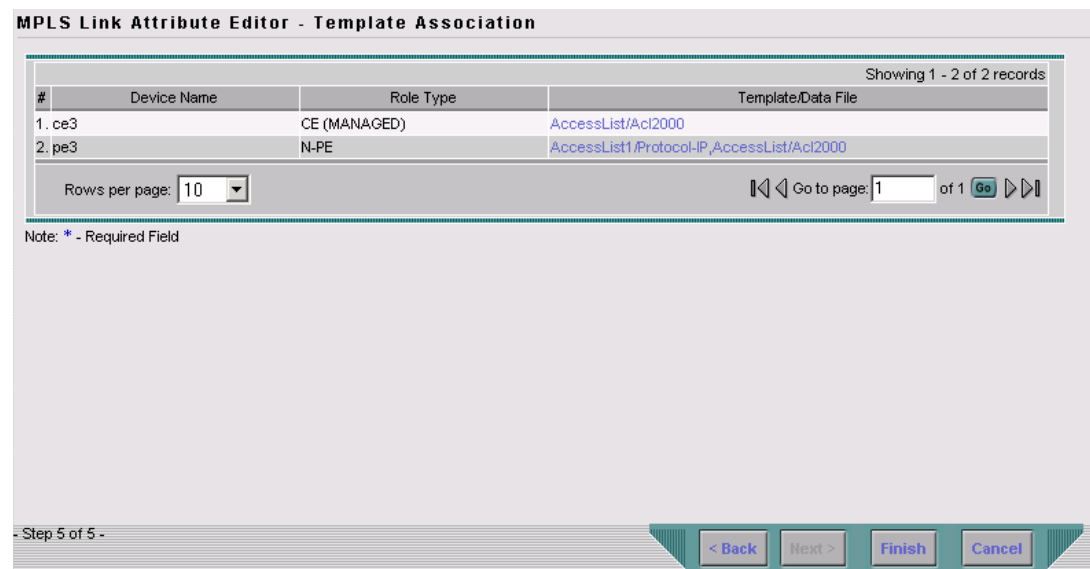
To associate templates and data files in a service request, you must select a link in the appropriate window of the Service Request Editor window, usually by clicking the **Add** link for the device.

Perform the following steps to choose the template(s)/data file(s) for the device(s):

-
- Step 1** Click the **Add** link in Template/Datafile column for a device.
The Add/Remove Templates window appears.

- Step 2** Click the **Add** button.
The Template Datafile Chooser window appears.
- Step 3** Navigate to a template in the folder tree and select it.
The template is listed in the right side of the GUI, along with any data files that are associated with it.
At this point, you can either select an existing data file, or click the **Create Data File** button to create a data file dynamically in the workflow. The rest of the steps in this section cover the case of selecting an existing template and data file. For instructions on how to create a data file dynamically, see the section [Creating a Data File in the Service Request Workflow, page B-14](#).
- Step 4** Check the check box of a data file to choose it.
- Step 5** Click the **Accept** button to confirm the choice.
The template/data file combination appears in the Add/Remove Templates window.
- Step 6** To add additional templates/data files to the list, click the **Add** button and repeat the appropriate steps, as covered above.
- Step 7** When you are satisfied with selection of templates/data files, click the **OK** button in the Add/Remove Templates window.
The templates/data files appear in the Template/Datafile column of the Template Association window, as shown [Figure B-7](#).

Figure B-7 Sample Templates Association Window with Templates/Data Files Selected



If multiple templates/data files are selected for a device, they appear as a comma-separated list, as shown in the figure.

- Step 8** Click the **Finish** button to create the service request with the template/data file selections you chose.
If the template associated to the service request is a super template comprising of one or more subtemplates, ISC displays a message confirming this.

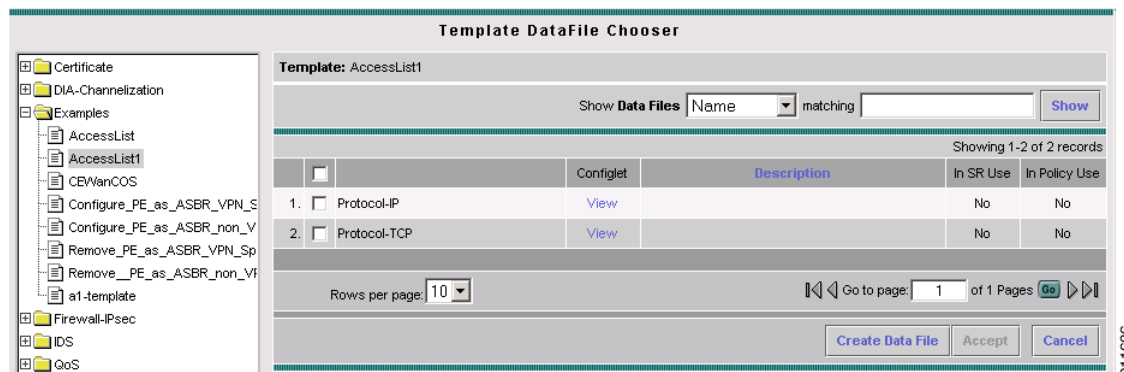
For information about how templates/data files are instantiated when the service is deployed, see the information provided in the section [Associating Templates to a Service Request, page B-9](#).

Creating a Data File in the Service Request Workflow

During the final stage of setting the link attributes for a service request, the Template Association window appears, such as the one shown in [Figure B-7](#). The Template Association window lists the devices comprising the link, the device roles, and the template(s)/data file(s) associated with the devices. You can choose the template(s)/data file(s) to be associated with the devices, as described in the section [Choosing a Template in the Service Request Workflow, page B-12](#). If one of the templates selected in the Template Datafile Chooser window does not have an associated data file or if you would like create a new data file for it, you can do this dynamically in the workflow while setting up the service request. Perform the following steps to dynamically set up a new data file for a template:

- Step 1** In the Template Association window, click the **Add** link in the Template/Datafile column for a device. (If a template was previously selected for a device, click the link for the template name.)
The Add/Remove Templates window appears.
- Step 2** Click the **Add** button.
The Template Datafile Chooser window appears.
- Step 3** Navigate to a template in the folder tree and select it.
The template is listed in the right side of the GUI, along with any data files that are associated with it. This example uses the AccessList1 template in the Examples directory, as shown in [Figure B-8](#).

Figure B-8 Templates Datafile Chooser Window with No Data File Listed



- Step 4** Click the **Create Data File** button to create a data file dynamically in the workflow.
The Data File Editor window appears, as shown in [Figure B-9](#).

Figure B-9 Data File Editor Window

Step 5 At this point, you are in the standard workflow for creating a data file in ISC.

In the Date File Editor window, you can specify a name and description for the data file, set variable values, view the configlet, and so on. For details on how to perform these steps, see the chapter “Service Design” in the *Cisco IP Solution Center Infrastructure Reference, 5.1*.

Step 6 When you have completed setting the attributes for the new data file, click **Save** and then **Close** to save this information and close the file; click **Configure** to show the configuration file; or click **Close** and then be sure to click **OK**, if you want to save the information you have created.

If you do not want to save this information, click **Close** and then click **Cancel**.

When the data file is saved, the Template Datafile Chooser window appears with the newly created data file listed.

Decommissioning Service Requests with Added Templates

This section describes how to decommission ISC service requests that have added templates.



Note

For general information on how templates are used in ISC, see Chapter 6, “Service Design” and Appendix D, “Template Usage” in the *Cisco IP Solution Center Infrastructure Reference, 5.1*.

As mentioned in the *Cisco IP Solution Center Infrastructure Reference, 5.1*, “Template commands are treated independently from those associated with a service creation. Consequently, template commands must be removed separately from the device(s) during a service decommission. To remove prior template commands, a separate template is needed during a decommission process. Decommissioning a service request does not automatically remove the original template commands. A separate negate template needs to be added to the decommission process and the original templates must be removed. The negate template must contain the necessary NO commands to successfully remove any unwanted IOS commands added by the original template.”

The standard way to create a service request with a template added is as follows:

1. Define the service policy.
2. Build a template with a data file (and also a negate template and data file).
3. Create the service request with the template added. The steps to do this are covered in relevant chapters of this guide.
4. Deploy the service request to which the template was added.

To decommission a deployed service request, including associated templates, you must perform the following steps.

1. Create a negate template with data file (if one does not exist). This is used to remove the commands imposed by the original template. For an explanation of negate templates, see Chapter 4, “Using Templates” in the *Cisco IP Solution Center API Programmer Guide, 5.1*.
2. Decommission the service request. The negate template will be picked up dynamically. The service request remains in the **Requested** state, but changed to an Operation Type of Delete.
3. Deploy the service request. This decommissions the service request and downloads the negate template, which removes the original template commands.

Viewing Templates from the Service Requests Window

In the Service Requests window, a paper clip icon appears in the Data Files column if a service request has one or more templates associated with it, as shown in [Figure B-10](#).

Figure B-10 Service Requests Window with Data Files Column

Service Requests

Show Services with Job ID matching * of Type All Find

Showing 1 - 4 of 5 records

#	Job ID	Data Files	State	Type	Operation Type	Creator	Customer Name	Policy Name	Last Modified	Description
1.	<input type="checkbox"/> 15		DEPLOYED	VRF	MODIFY	admin	Customer1	None	12/18/07 8:19 PM	
2.	<input type="checkbox"/> 16		DEPLOYED	MPLS	ADD	admin		MPLS_PE_NO_CE	12/17/07 10:49 PM	
3.	<input type="checkbox"/> 19		DEPLOYED	MPLS	MODIFY	admin		MPLS_PE_NO_CE	1/4/08 2:49 PM	
4.	<input checked="" type="checkbox"/> 21		DEPLOYED	MPLS	MODIFY	admin	Customer1	MPLS_PE_CE	1/7/08 4:23 PM	

Rows per page: Go to page: 1 of 1 Go

Auto Refresh: Create Details Status Edit Deploy Decommission Purge



Note

You can use the **Show Services with** field to search for service requests that have a specific data or template file. Choose **Data File Name** or **Template Name** from the drop-down list and enter a search string in the **matching** field. The matching field is not case-sensitive and supports wildcards (*). You can further limit the search by using the **of Type** field to confine the search to a particular service type. When listing service requests using Template Name, provide the entire path of the template file location (for example: examples\template, where examples is the folder name and template implies the template name).

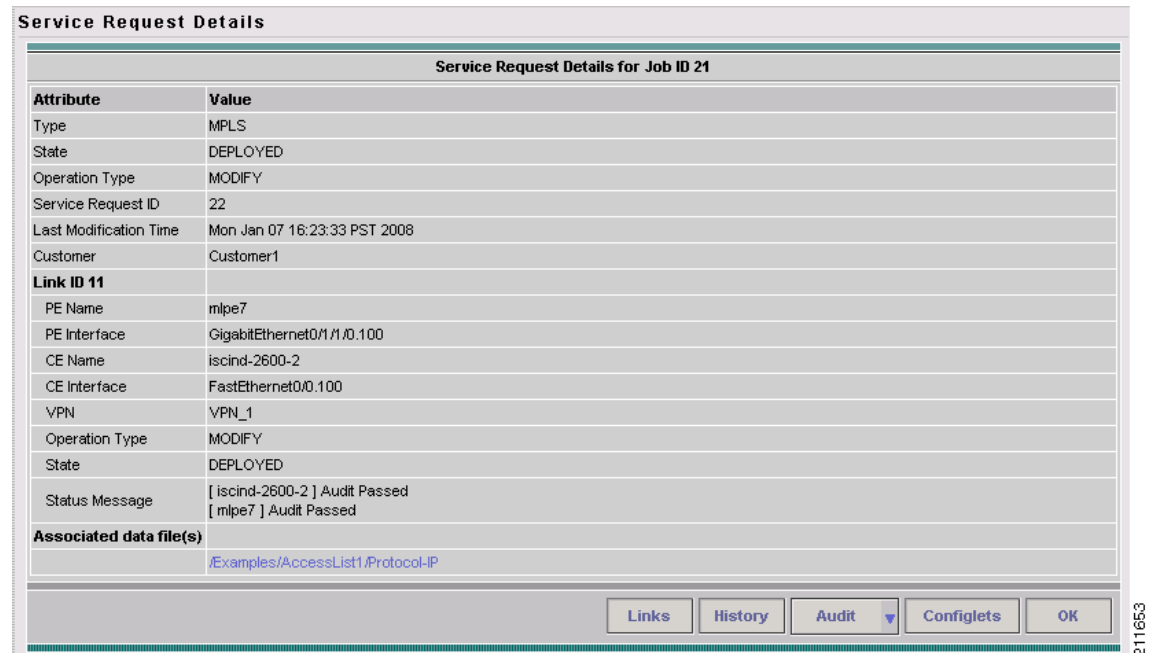
To view the configlet(s) for the template(s) associated with a service request, perform the following steps.

Step 1 In the Service Requests window, check the check box for a service request with an associated template, as indicated by a paper clip icon in the Data Files column.

Step 2 Click the **Details** button.

The Service Request Details window appears, as shown in [Figure B-11](#).

Figure B-11 Service Request Details Window



The Associated data file(s) row displays a link for each data file associated with the service request, as shown in the figure.

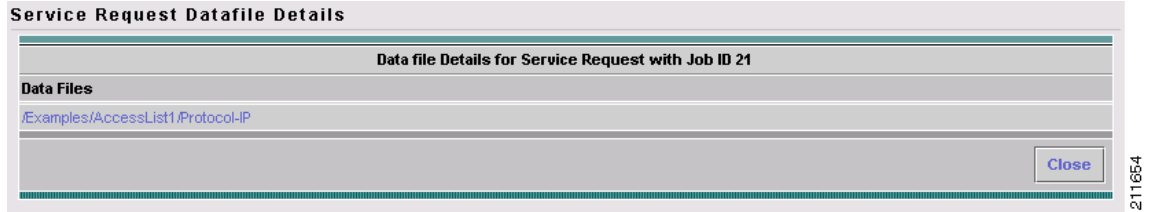
Step 3 Click a data file link to display the configlet for the template.

Step 4 After viewing the configlet, click **OK** to close the configlet display window.

Step 5 Click **OK** to close the Service Request Details window.

Step 6 As an alternative, you can access the data files associated with a service request by clicking on the paper clip icon in the Service Requests window.

The Service Request Datafile Details window appears, as shown in [Figure B-12](#).

Figure B-12 Service Request Datafile Details Window

The window displays only a list of the data files associated with the service request.

- Step 7** Click a data file link to display the configlet for the template.
 - Step 8** After viewing the configlet, click **OK** to close the configlet display window.
 - Step 9** Click **Close** to close the Service Request Datafile Details window and return to the Service Requests window.
-