Importing Offline Collections

This chapter describes the WAE Design GUI tools available to discover and retrieve information from router configuration tools and from the Alcatel-Lucent 5620 Server Aware Manager (SAM) server. These tools are useful for capturing and importing network information into the WAE Design GUI.

Import Router Configuration Files

The Parse Configs tool reads a set of Cisco, Juniper Networks, and/or Huawei router configuration files, creates a plan file of the network, and imports it into the WAE Design GUI.

Step 1 Select the File > Get Plan from > Configs menu.

Step 2 Select whether to create a new plan file or add information to an existing plan.

- For new plans, enter the complete path and plan file name you are creating.

- If updating an existing plan file, select how to update nodes.

  - Update only if the nodes exist in either config files or a plan file.

  - Update only if the nodes exist in both config files and a plan file.

  - Update only if the nodes exist in config files and do not exist in a plan file.

Step 3   Enter or browse to the name of the directory containing the router configurations to be parsed.

Step 4   Select one or more configuration objects to parse.

Step 5   Select whether IGP is OSPF or IS-IS.

- If parsing OSPF, either use all OSPF areas or select one and enter its area ID as an integer or IP address. The default is area 0.

  If multiple process IDs exist, WAE Design uses the first one in the config unless you specify otherwise.

- If parsing multi-level IS-IS, select whether to use Level 1, Level 2, or both.

  If multiple instance IDs exist, WAE Design uses the first one in the config unless you specify otherwise.

Step 6   To set advanced options, click Advanced.

- Enter values for these options, as needed, if you prefer not to use the following WAE Design defaults.

  – Ignore BGP ASNs.

  – Loopback interface for Cisco routers is 0.

- Select these options, as needed.

  – Create interfaces and circuits to build a network topology after parsing the configs.

  – Create pseudonodes and interfaces for matching circuits for shared media, such as Ethernet LANs.

  – Create port circuits to connect LAG ports to remote ports. The match between the two is created in ascending order using a combination of port names and port numbers.

Step 7   To save the imported SAM information as a plan file, select File > Save As.

Import IGP Database

The Parse IGP tool converts IGP information from router `show` commands and imports the IGP database into a new or existing plan file.

Step 1   Select the File > Get Plan From > IGP Database menu.

Step 2   Either enter or browse to one of the following.

- Directory name containing multiple IGP database files.
- File name containing the IGP database. This file is the equivalent of the `show` command output for Cisco and Juniper routers.

Step 3   Select whether to import OSPF or IS-IS database.

- For OSPF, select whether to import OSPFv2 or OSPFv3. Note that OSPFv3 is the protocol that runs in IPv6 networks.

  By default, WAE Design collects OSPF area 0 LSDB. To import topologies from non-zero area LSDBs, select the All option.

- For IS-IS, select whether to import IS-IS for IPv4 or IPv6. IS-IS topologies must be congruent.

  Choose Level 1, Level 2, or both metrics. If you select the Both option, WAE Design combines both levels into a single network, and Level 2 metrics take precedence.

Step 4   Select whether to use DNS to resolve IP addresses (node names) in the resulting plan file. (In the GUI, routers are called *nodes*.)

Step 5   Click OK.

Step 6   To save the imported information as a plan file, select File > Save As.

Import SAM Server Information

The SAM Get Plan retrieves network topology, as well as current or historical interface traffic measurements, from 5620 SAM servers, and imports it into the WAE Design GUI. The tool queries each router in the discovered network to obtain additional information, such as router name, vendor, and model. It also creates a plan file.

Step 1   Select the File > Get Plan from > SAM menu.

Step 2   In the Access section, specify the following.

- Server—Enter the name or IP address of a SAM server.
- Server Protocol—Select a protocol that the SAM server supports: either HTTP (not encrypted) or HTTPS (encrypted).
- Username—Enter the user name for the SAM server. The user account must have the oss role as one of its Scope of Commands Roles. The admin group does not have this role by default.
- Password—Enter the password associated with the user account configured on the SAM server.
- Log Level—Select the logging level you wish to record when SAM Get Plan is executed.
- Log File—Enter or browse to the location where you want to store the log file.
- Server Configuration—Click to specify a port number, backup server, backup port, or proxy server.

Step 3   In the Configuration section, specify the IGP topology discovered by SAM that you want to import.

- OSPF—Select if the IGP is OSPF, and then either select or enter its area.
- IS-IS—Select if the IGP is IS-IS, and then select the level as 1, 2, or both.

- • Optional selections—Select each topology option according to the configuration information SAM has been configured to collect and that you need to import into the plan file. You can make multiple selections.

Step 4   In the Operational Data section, identify whether to include actual LSP paths and traffic statistics in the plan file. The default is to not include them.

- • To import the actual LSP path, select Actual.
- • Select one or more types of traffic statistics to import. These are not available unless you are collecting the associated topology.
- • If including traffic statistics, identify the criteria for the logged statistics to import.
  - – Measurement Window Length (min)—Amount of time over which the traffic is averaged. For example, if this is set to 30, the amount of traffic over a 30-minute time period is averaged. The recommended value is greater than twice the Collection Interval of the accounting policy on the SAM server.

      – Number of Measurement Windows—Number of samples being collected. For example, if you enter a 2 here and a 30 in the Length field, you would generate two 30-minute samples.

Step 5   To import the SAM information, click OK.

Step 6   To save the imported SAM information as a plan file, select File > Save As.