CHAPTER **2**

Overview

Access: Applications > Coordinated Maintenance

The WAE Coordinated Maintenance application simplifies and automates the process of managing controlled network outages by guiding you on when to perform maintenance events at optimal times. This not only reduces uncertainty about the impact of network changes, but also minimizes impact on the network during scheduled outages.

The principle is simple. You submit a maintenance event for evaluation for a given time frame, and the application returns an evaluation report that identifies the impact of temporarily taking down that object. For instance, you might need to take down all nodes in a specific area for an hour to update the software or replace linecards, or you might need to take down circuits due to rerouting of L1 cross-connects in a PoP. By submitting an event for evaluation, you gain insight into whether you can safely schedule the outage in the network.

There are a few terms to understand when using the UI and reading the documentation.

- **Event**—Activity of taking down one or more network objects for maintenance during a specified, fixed time slot.

- **Evaluation**—A set of tests that determines whether an event is permissible during the requested time slot.

- **Blackout**—Time period reserved for having no events. You can override this, if needed.

- **Overlapping event**—An event that has a date and time duration that intersects with the date and time duration of another event.

- **Plan file**—The file format used to store WAE Collector's network model.

Evaluations

Each evaluation consists of one or more groups, and each group contains one or more tests that is either built-in to the application or is created by a user. Each test has its own criteria for success. While running these tests, the evaluation process considers the following to determine the impact the proposed event will have on the traffic utilization throughout the network.

- Simulated traffic conditions for the specified time slot based on peak traffic demand for the most recently matching time period and day.

  For example, if an event is proposed for a Tuesday from 8:00 to 9:00 AM, the application searches the database for data on the previous Tuesday from 8:00 AM to 9:00 AM. If no data is available, it searches the Tuesday prior for the same time until it finds data to use in the evaluation process. Usually, the data is from one week prior.

- Most recent topology
- Previously scheduled events
- Blackout windows

Multi-User Considerations

Multiple users can access the same WAE Coordinated Maintenance application, which means they are using the same collected traffic and topology sources. All users have equal privileges. Therefore, it is important to realize the impact your configurations have on others. For instance, if you schedule a blackout window, that same blackout window applies to all users. Likewise, if you change a Settings page, all users have that same default.

Users might simultaneously evaluate events for the same time period. Any evaluations completing after the first one is scheduled returns a message that there are overlapping events. When this overlap occurs, evaluations must be rerun in order to schedule the event. For information see the Re-Evaluate Using Different Overlapping Events section in the Viewing Events and Reading Evaluation Reports chapter.

Common UI Options

Task	Description
Enter paths	If entering a path, you can use any variable that is currently set in the environment on which the server is hosting the application. For example, both $CARIDEN_ROOT and $WAE_ROOT are acceptable, as well as variables that you set.
Search in tables	All tables have a search field. To find any information in any column, start typing the search string. The table results change automatically as you type. If you type a new entry, the search results are for the entire table (not for what is currently displaying in the table). Note that searches are not case-sensitive.
Refresh data	To refresh data in any table to show the most recent data for all users, click the Refresh icon in the tab.
Delete an event or a test	Delete an event or a test by clicking the trash can icon.

Configurations

Outside of configuring collection as input to the WAE Coordinated Maintenance application, all necessary configurations are accessible from the Settings tabs. There are no configuration files or CLI tools to access.

Troubleshooting

The WAE Coordinated Maintenance log file is $WAE_ROOT/logs/applications.log.

Related log files, such as for the web server, are in $WAE_ROOT/logs.

Both the application and web server log files are viewable from the Statistics UI, which is available from the web home page.

> **Note** $WAE_ROOT and $CARIDEN_ROOT are the same environment variables. They both mean the default installation directory, which is /opt/cariden by default.

Related Topics

- *WAE Design Integration and Development Guide* (for information on plan files)