Release Notes for Cisco Automated Subsea Tuning, Release 2.0.1.1

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Cisco Automated Subsea Tuning Overview

During field installations, the manual optimization of submarine optical links for maximum spectral efficiency is a cumbersome and time-consuming process. The process involves a manual tuning of the line cards by searching for an optimal combination of line rates, BPS, and channel spacing. The Cisco Automated Subsea Tuning (Cisco AST) overcomes this challenge.

Cisco AST is a cloud hosted microservices-based software application. Cisco AST automatically tunes the NCS 1004 transponder that is connected to any DWDM line system by using real-time performance information, to optimally use the subsea cable capabilities. Cisco AST collects network data, analyses, executes the tuning algorithm, and deploys the configuration in the system. This solution is beneficial for customers who use Cisco's optical submarine network systems.

Software and Hardware Requirements

Cisco AST Server Installation Requirements

To install the Cisco AST application, you must have the following:

- VM with minimum 24 GB RAM, eight Core CPU with CentOs v7.6, and a storage of at least 50 GB

- Docker version 19.03.2, build 6a30dfc The install script installs this version of docker if it is not found on the VM).

- Docker-compose version 1.24.1, build 4667896b (The install script installs this version of docker compose if it is not found on the VM).

- Check the firewall rules on the VM or server where you install the Cisco AST, to ensure that HTTPS port 443 is open.

Table 1: Supported Browser Versions

Browser	Latest Version	Minimum Browser Version
Google Chrome	81.0.4044.122	72.0.3626
Mozilla Firefox	75.0	68.6.0esr version
Microsoft Edge	81.0.416.64	44.18362.449.0

Open Caveats

The following table lists the open bugs in Cisco AST, Release 2.0.1.1.

Table 2: Open Caveats

Caveat ID Number	Description
CSCvu34869	User Interface freezes for 4–5 seconds on the subsea setting screen, while tuning a scaled project (64 channel, 128 trunk ports).
CSCvu34891	If the tuner service is restarted when a project is in "Awaiting for confirmation" state, the configuration provided by the tuning algorithm fails.
CSCvv25134	When you delete a project that involves devices that are used in multiple projects, all the reports that are related to those projects are deleted, and cannot be recovered.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation.

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