

Oracle Communications Network Discovery Overview

Updated June 2007



Oracle Communications Network Discovery Overview

**Oracle Communications Network
Discovery provides automated discovery
of the network including network
elements, physical resources, logical
resources, and provisioned services .**

INTRODUCTION

Keeping your operational support systems (OSSs) in synch with your live network improves data accuracy and increases your service provisioning success rate. Oracle Communications Network Discovery provides automated discovery of the network including network elements, physical resources, logical resources, and provisioned services. You can use Oracle Communications Network Discovery to send discovery scan results to the upstream reconciliation system, enabling you to compare the results against your inventory and report discrepancies.

INTRODUCING ORACLE COMMUNICATIONS NETWORK DISCOVERY

Oracle Communications Network Discovery works with a broad set of network-facing cartridges to automate the discovery of physical resources, logical resources, and provisioned services data from network elements, element management systems (EMSs), and network management systems (NMSs). The solution discovers and reports detailed information about physical resources such as chassis, slots, and ports. It also identifies information about logical resources such as interfaces and connections, and what services are provisioned. Key Oracle Communications Network Discovery features include

- Full core-to-edge discovery
- A highly extensible cartridge architecture
- Flexible configuration and scheduling of discovery scans

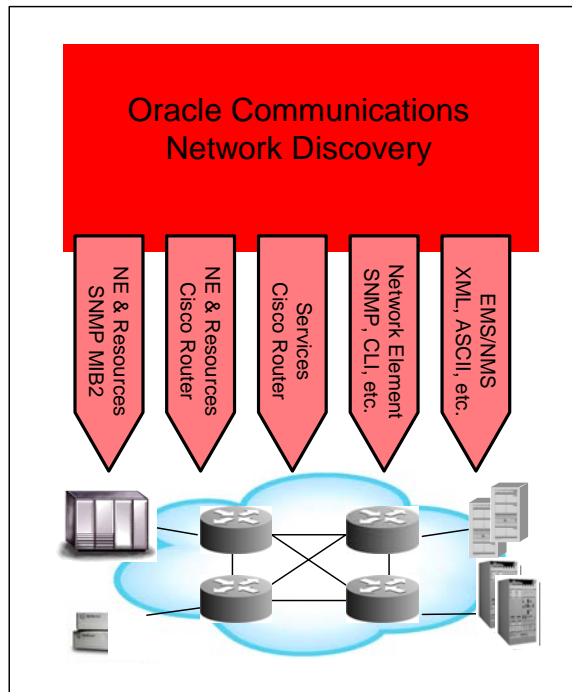


Figure 1: Oracle Communications Network Discovery scans data from a variety of device types.

Oracle Communications Network Discovery captures the detail needed to drive all operational support system (OSS) functions.

Full Core-to-Edge Discovery

To synchronize the total inventory system with the network, Oracle Communications Network Discovery uses a broad discovery mechanism that can upload data from a variety of device types as well as discover elaborate information about these devices and the logical elements residing on them. The solution can find any type of system, including network elements, EMSs, and NMSs.

Oracle Communications Network Discovery captures the detail needed to drive all operational support system (OSS) functions. From a traditional inventory perspective, this means discovering each system’s shelves, cards, and ports, as well as all the attributes of each physical component—including software versions, card types, port types, port configurations, and administrative status. Discovering physical resources, logical resources, and provisioned services is critical for enabling efficient service fulfillment.

Highly Extensible Cartridge Architecture

Oracle Communications Network Discovery’s extensible cartridge-based architecture delivers ultimate flexibility. Cartridges are modular components that contain the necessary logic to discover physical devices, configuration data, and the associated attributes of each object type for a particular type of network element. This includes the network interface protocol and modeling of the collected data. A

broad inventory of industry-standard data formats and transport protocols are available.

The modular nature of cartridges allows you to configure support for new device types without affecting the core software platform. The addition or upgrade of new cartridges is not bound by core software release schedules. Based on the existing cartridges, virtually any network element, EMS, or NMS can be rapidly supported.

Flexible Configuration and Scheduling of Discovery Scans

Oracle Communications Network Discovery uses an intuitive graphical user interface (GUI) to configure and schedule discovery scans. A discovery scan includes the interface protocol, the address range to scan, the configuration of scan parameters (such as timeout interval and number of retries), and the scan schedule.

You can schedule a discovery scan to run once (at a specified time and date) or on a recurring basis (daily, weekly, or monthly). You can also run the scan on demand. You can use configurable blackout periods to ensure that scans do not run during peak network busy times or during network upgrade windows. An inexperienced user can easily configure Oracle Communications Network Discovery scans using a step-by-step wizard.

With Oracle Communications Network Discovery, you can also use groups to simplify management and operation of discovery scans. You can group scans to manage geographic regions (such as north, south, east, and west), types of networks (production network, lab network, and internal networks), and device types (core routers, edge switches, and transport). You can also use groups to make a set of scans active or inactive.

The Oracle Communications Network Discovery GUI displays the current status and progress of each scan in the GUI. It lets you know if a scan is currently running and shows the date and time of the next scheduled scan, as well as any alarms. For scans in progress, the GUI displays the number of active network elements, elapsed time, percentage complete, and estimated time to completion.

You can use configurable blackout periods to ensure that discovery scans do not run during peak network busy times or during network upgrade windows.

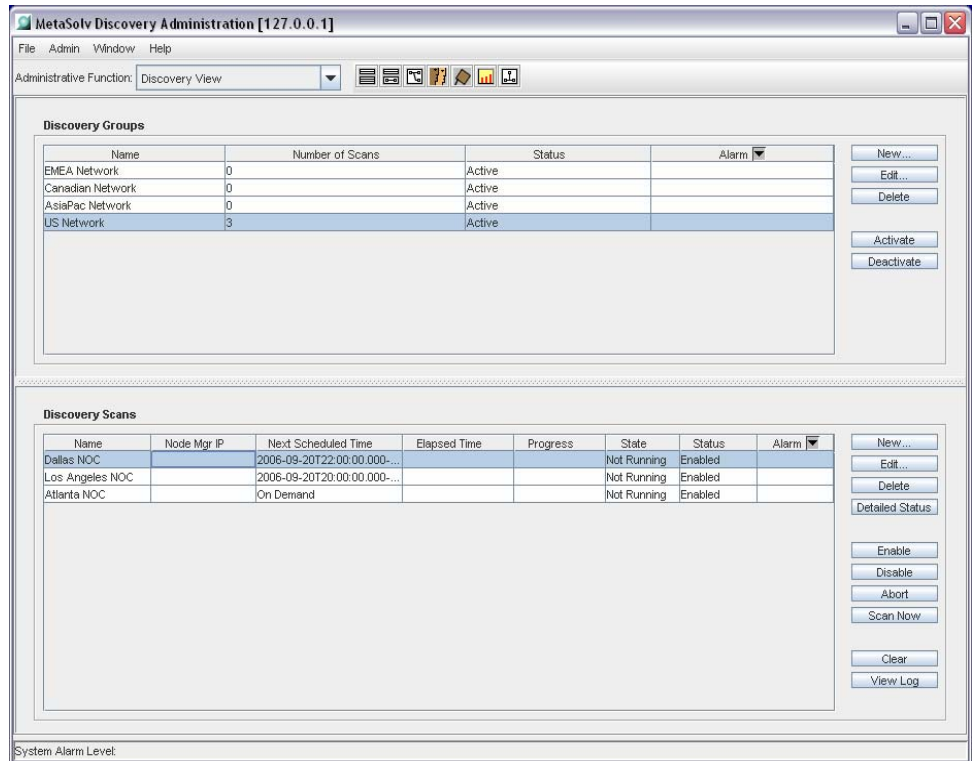


Figure 2: Oracle Communications Network Discovery GUI

Flexible Deployment Options

Oracle Communications Network Discovery can simultaneously support different network interface protocols, enabling a single deployment to discover an entire network of disparate network elements, EMSs, and NMSs. Using a single GUI, you can consolidate the application on a single server or distribute it across multiple servers. Distributing Oracle Communications Network Discovery minimizes network impact by keeping high-overhead discovery protocols on the local area network (LAN) instead of the wide area network (WAN).

CONCLUSION

Oracle Communications Network Discovery provides effective, out-of-the-box functionality that facilitates the tracking and management of your valuable network assets. The solution leverages highly extensible cartridges to automate the discovery of physical resources, logical resources, and provisioned services data from network elements, EMSs, and NMSs. This enables ultimate flexibility in today's rapidly changing technological environment.



Oracle Communications Network Discovery Overview
Updated June 2007

Oracle Corporation
World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Worldwide Inquiries:
Phone: +1.650.506.7000
Fax: +1.650.506.7200
oracle.com

Copyright © 2007, Oracle. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice.

This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission. Oracle is a registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.