

ALCATEL-LUCENT 5529 STATISTICS AND DATA COLLECTOR

With the introduction of real-time services such as voice and video over broadband access, service providers need to deploy operations support system (OSS) applications that track service quality, bandwidth usage and network load. To achieve these goals, OSS applications must be supplied with a large volume of network-generated statistical and performance data. A high-performance application, the Alcatel-Lucent 5529 Statistics and Data Collector (SDC) collects data, statistics and performance information from Alcatel-Lucent access network elements (NEs). Data are collected, stored, organized and transferred under the control of the OSS application. The Alcatel-Lucent 5529 SDC implements optimized collection mechanisms that protect NEs from processing overload. The Alcatel-Lucent 5529 SDC also provides a simpler, more efficient and cost-effective means for integration with the service-assurance OSS.

FEATURES†

- High-performance, bulk upload of statistics and performance data
- Instant, targeted, configurable and scalable data collection
- Output file customization to suit OSS data-format requirements
- Threshold-crossing alarm (TCA) notifications
- Web services-based OSS interface (Extensible Markup Language [XML]/Simple Object Access Protocol [SOAP])
- Ongoing collection monitoring and failure notification
- Schedulable output-file push to the OSS
- Cluster deployments that allow horizontal scaling for large networks

BENEFITS

- Does not impact NE processing power
- Reduces the cost and complexity of OSS integration, freeing up resources for more strategic investments
- Enables better service quality by supplying the service-assurance application with valuable data
- Keeps the network in the appropriate working condition for better service quality
- Optimizes data collection for combined Alcatel-Lucent 5529 SDC/Motive Network Analyzer (NA) deployments

TECHNICAL SPECIFICATIONS

Data-collection capabilities

- Automatic NE inventory alignment with the Alcatel-Lucent 5520 Access Management System (AMS)
- Continuous statistics collection over the full network
 - Static collection scope based on selected NEs or on NE name substring
 - Dynamic collection scope based on NE family
 - Easy graphical user interface (GUI) filtering capabilities to optimize operational efficiency
 - 15-minute, hourly, daily and two-day collection intervals
- Scheduled, detailed collection: interval from five minutes to seven days
- Instant, targeted data collection

Processing capabilities

- Bulk file management
 - Customizable bulk-output file formats
 - Automatic compression
 - Automatic history management
 - File generation per NE or for the complete network
- Post-collection filtering based on any collected statistics

- Threshold-crossing alarms, with filtering based on:
 - Absolute value
 - Delta value
 - Step value
- Interval-relative reporting of rolling counters

Configuration features

- NE inventory synchronization (manual or automatic daily/weekly)
- Data-collection management
 - Configuration of collection strategies
 - Import/export of collection strategies
 - Start/stop/view of continuous collection jobs
- Configuration of processing behavior:
 - TCAs
 - Output data handlers
 - Relative reporting of rolling counters

Northbound interface

- XML/SOAP interface
- Start/stop/view of continuous collection jobs
- Start/stop/view of scheduled data collection
- Configuration of collection strategies (same as GUI)
- Start of instant collection

† Feature content based on Release 8.2

- Notification interface
 - TCAs (Simple Network Management Protocol [SNMP] and file-based)
 - System alarms (SNMP)
- Data transfer (file-based)
 - OSS file-transfer scheduling
- Alcatel-Lucent OSS Connected Partner Program provides out-of-the-box integration with the main third-party PM-OSS applications, such as:
 - InfoVista® VistaLink®
 - IBM® Tivoli® Performance Manager®

Southbound interface

- SNMPv1
- SNMPv3
- Bulk upload interface

Supported access NEs*

- Alcatel-Lucent Intelligent Services Access Manager (ISAM) family of products
- Alcatel-Lucent Optical Network Terminals (ONT)
- Alcatel-Lucent Advanced Services Access Manager (ASAM) family of products
- Alcatel-Lucent Stinger® DSL Access Concentrator
- Genband® G6® Reverse Media Gateway

* For a complete list of supported network elements, please contact your Alcatel-Lucent representative.

Hardware and operating system platforms

- Hewlett Packard™ (HP)/Red Hat™ Enterprise Linux

Minimum system requirements

System requirements vary based on each specific application. Please consult your Alcatel-Lucent representative for minimum client platform and server requirements.

Scalability

- Bulk Collection throughput of 60 million statistics per hour and per server
 - Extendable to higher volumes

Figure 1. Alcatel-Lucent 5529 SDC system overview

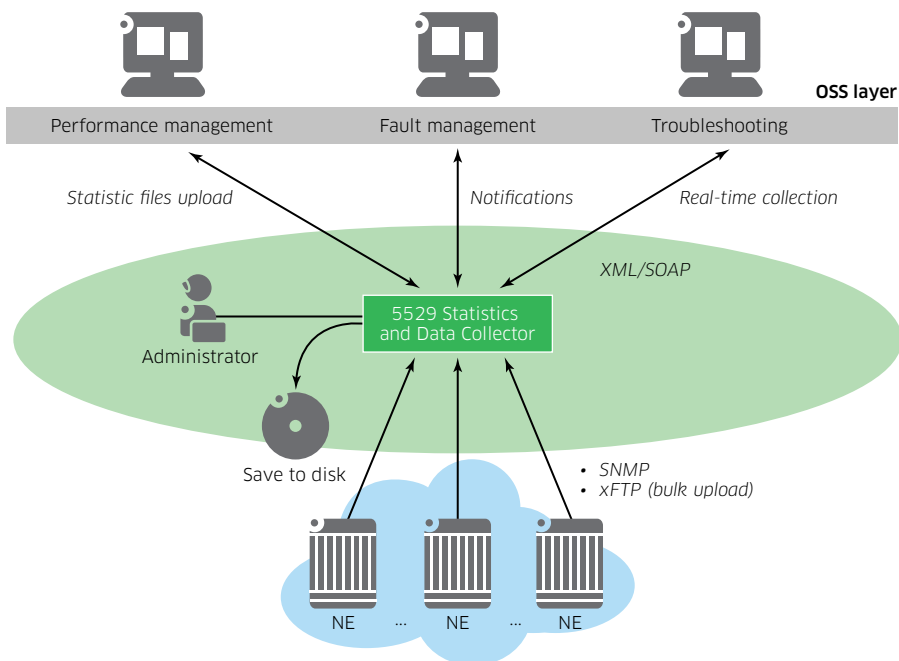


Figure 2. Alcatel-Lucent 5529 SDC GUI

5529 STATISTICS & DATA COLLECTOR

Data collector

Configuration

Administration

Help

Current user: admin

Alcatel-Lucent

Nodes of node provider NODES

[Node providers] [Refresh]

i

Total number of nodes purged due to purgeDeletedDslams action is/are: 14

Showing row 1 to 20 of 22

Name	Selector	IP address	Status	Model	MID Version	Release Version	Interface profile name
ASAM62		138.120.222.62	Configured	Alcatel ISAM (LEUS)	4.2.0.10	FG 4.2.10h	Default
ASAM62_LANX		138.120.222.62	Configured	Alcatel ISAM (LEUS)	4.2.0.10	FG 4.2.10h	Default
ISAM194		138.120.241.194	Configured	Alcatel ISAM (LNEU)	4.5.2.2.1	4.5.02	Default
ISAM194_IHUB	HG Node List 1	138.120.241.194	Configured	Alcatel ISAM (LNEU)	4.5.2.2.1	4.5.02	Default
TEC60		138.120.206.60	Configured	Alcatel ISAM (LEUS)	4.2.0.10	FG 4.2.10h	Default
TEC89		138.120.206.89	Configured	Alcatel ISAM (LEUS)	4.1.0.6	FG 4.1.02b	Default
TCCASAM119		138.120.222.119	Configured	Alcatel ASAM (LAUS)	4.6.0.6	FG10.1.03	Default
ISAM04		138.120.242.195	Configured	Alcatel ISAM (LNEU)	4.5.1.2.0	4.5.01	IACM
ISAM04_IHUB		138.120.242.195	Configured	IHUB	8.0		IHUB
ISAM17		138.120.242.17	Configured	Alcatel ISAM (LNWW)	4.4.4.0.1	4.4.04/	IACM
ISAM17_IHUB		138.120.242.17	Configured	IHUB	8.0		IHUB
ISAM_SAR		138.120.209.62	Configured	Alcatel ISAM (LNEU)	4.5.2.4.0	4.5.02	IACM
ISAM_SAR_II IUB		138.120.209.62	Configured	II IUB	8.0		II IUB
GPON01		138.120.241.201	Configured	A7342 GPON	4.8.0.8.0		netman
GPON01_LANX		138.120.241.201	Configured	A7342 GPON Lanx	4.8		ams
GPON02		138.120.242.190	Configured	A7342 GPON	4.7.4.8.1		netman
GPON02_LANX		138.120.242.190	Configured	A7342 GPON Lanx	4.7.10		ams
GPON03		138.120.241.209	Configured	A7342 GPON	4.8.4.3.6		netman
GPON03_LANX		138.120.241.209	Configured	A7342 GPON Lanx	4.8.04		ams
GPON04		138.120.241.200	Configured	A7342 GPON	4.8.6.2.6		netman

Filter

Purge Deleted Dslams