

The Path to Improving Network Support Operations

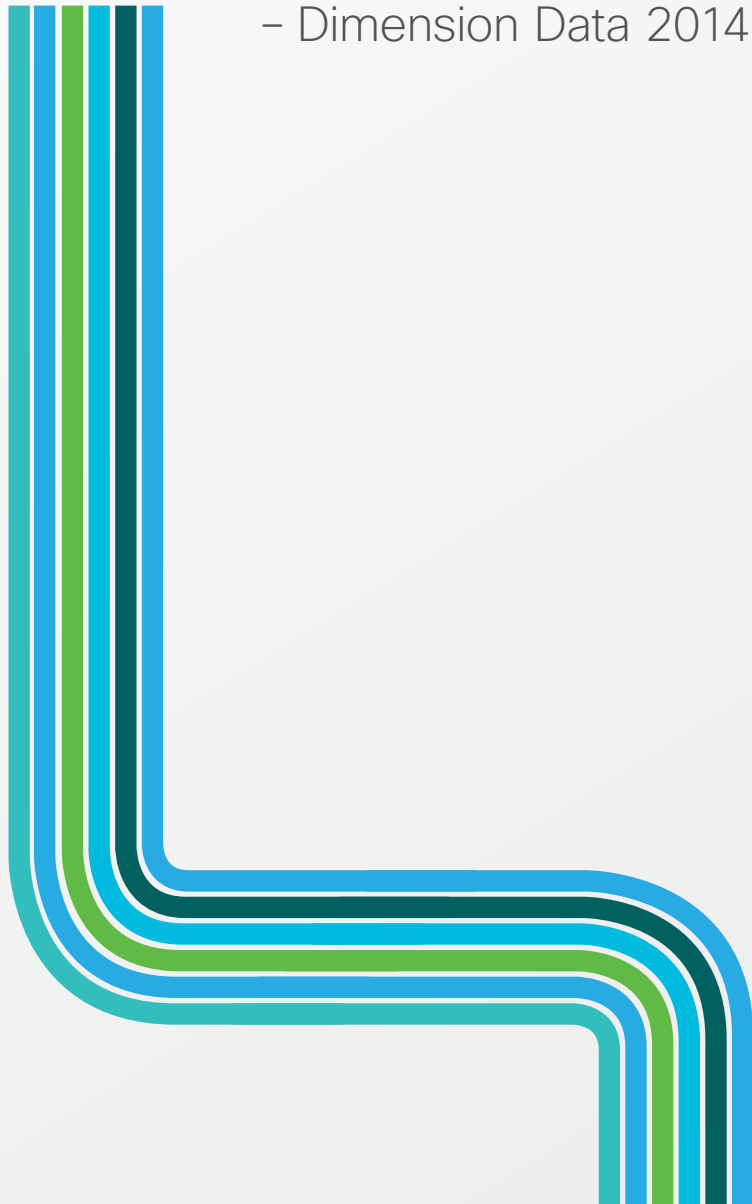
Five Steps to Better Inventory, Alert,
and Contract Management

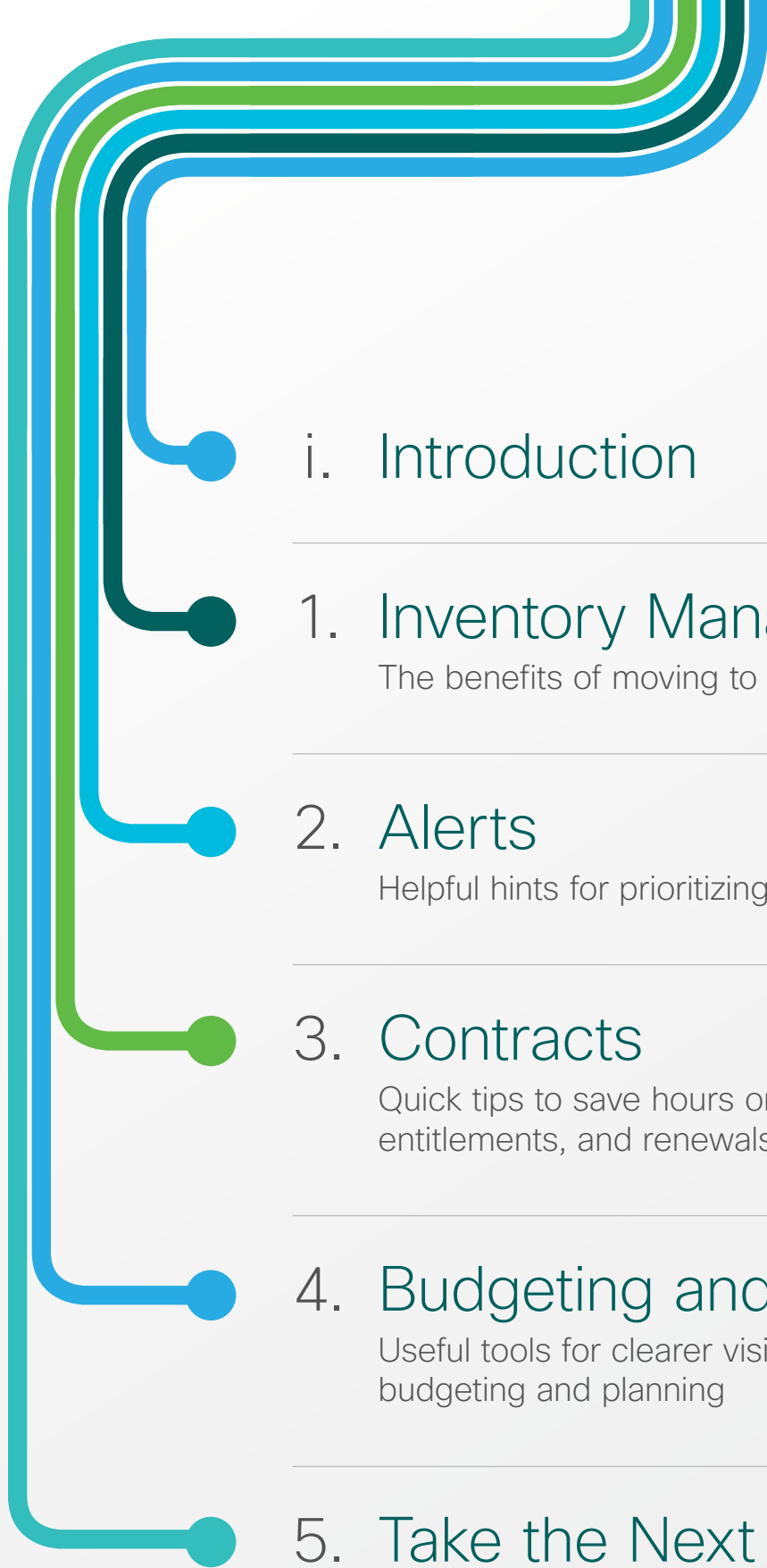




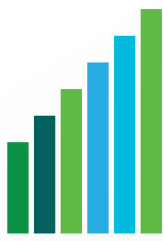
“The most important requirement for the network to successfully support business is...a mature set of operational tools and processes.”

– Dimension Data 2014 Network Barometer Report¹



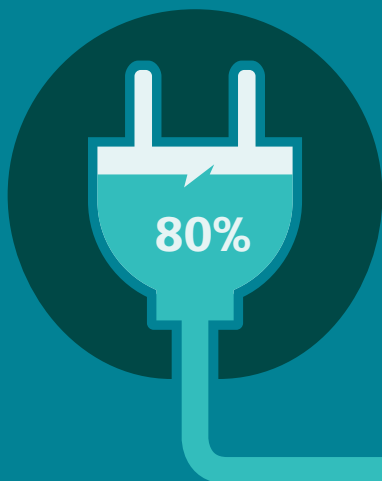



i.	Introduction	4
1.	Inventory Management The benefits of moving to automation	6
2.	Alerts Helpful hints for prioritizing alerts	10
3.	Contracts Quick tips to save hours on device coverage, entitlements, and renewals	15
4.	Budgeting and Planning Useful tools for clearer visibility into network budgeting and planning	21
5.	Take the Next Step Put this advice into action with expert support	26




Today's businesses depend more than ever before on their network infrastructure to help deliver on critical company goals, such as building customer loyalty and expanding global presence.

Increasingly complex networks are putting more stress on the infrastructure and those who manage and operate it. Making matters more difficult, IT departments are being tasked with initiatives, such as cloud, big data, social, and mobile, all with reduced budgets and staffs.



A recent Gartner study found that **80 percent of network outages over the next year** will be caused by people or process issues, most often during changes in personnel, configuration, or operating system.² 



If IT leadership is to rise to this challenge, it must take a new approach to familiar, day-to-day tasks, such as keeping an up-to-date inventory of devices, staying on top of network alerts, and managing device coverage in a timely and accurate way.

Take a moment to answer the following questions and find opportunities for improvement in your IT approach:

- **Are you able to identify potential issues before they affect your business?**
- **Do you have trouble managing and prioritizing alerts?**
- **Are you losing productivity time because of labor-intensive, manual contract renewal processes involving spreadsheets, purchase orders, and other paperwork?**

In this eBook, you will find simple, actionable tips for improving installed base inventory and contract management, and simplifying operations to make your critical company goals a reality.

▼ **Let's get started.**

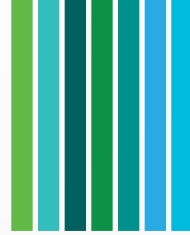


1

Inventory Management

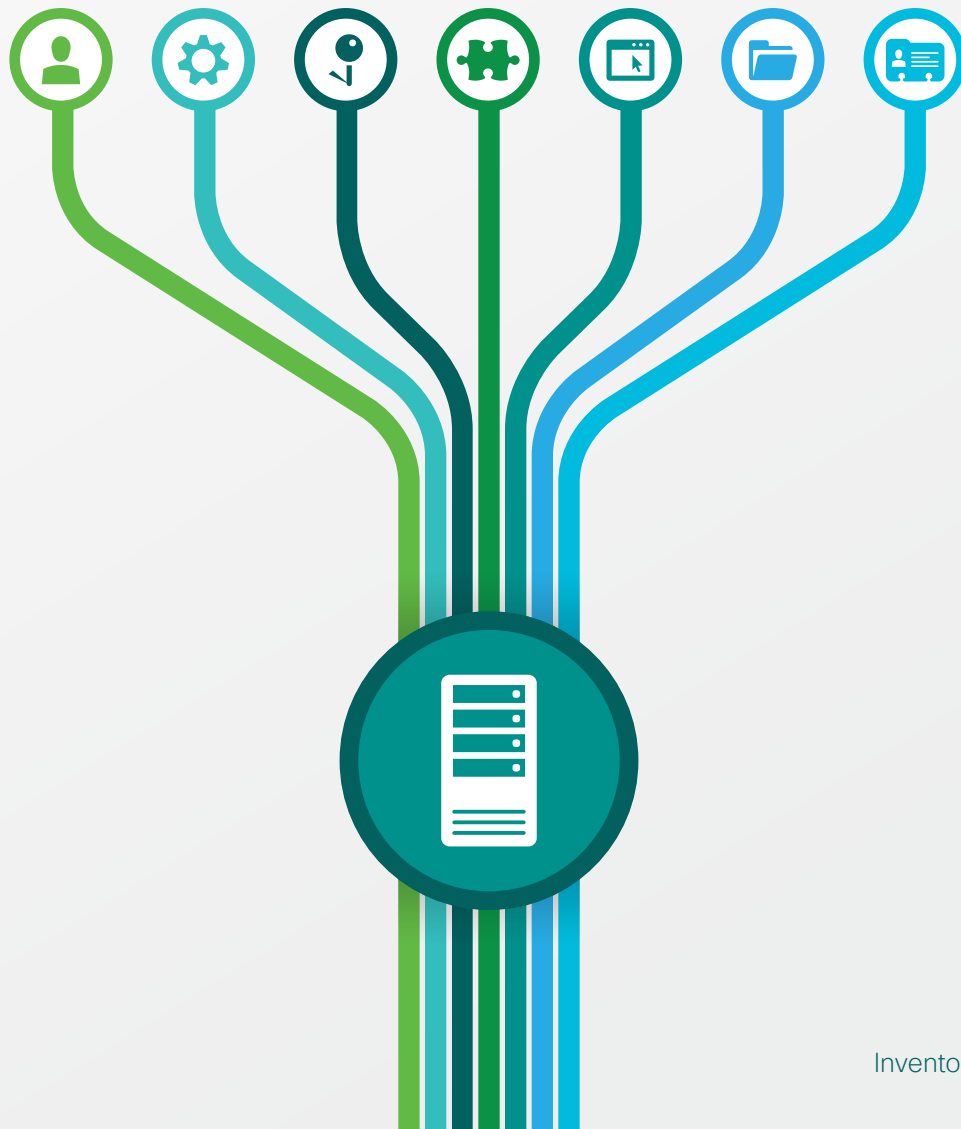
Inventory management used to be easier. You could simply walk around with a pen and pad and jot down all the devices that you saw.

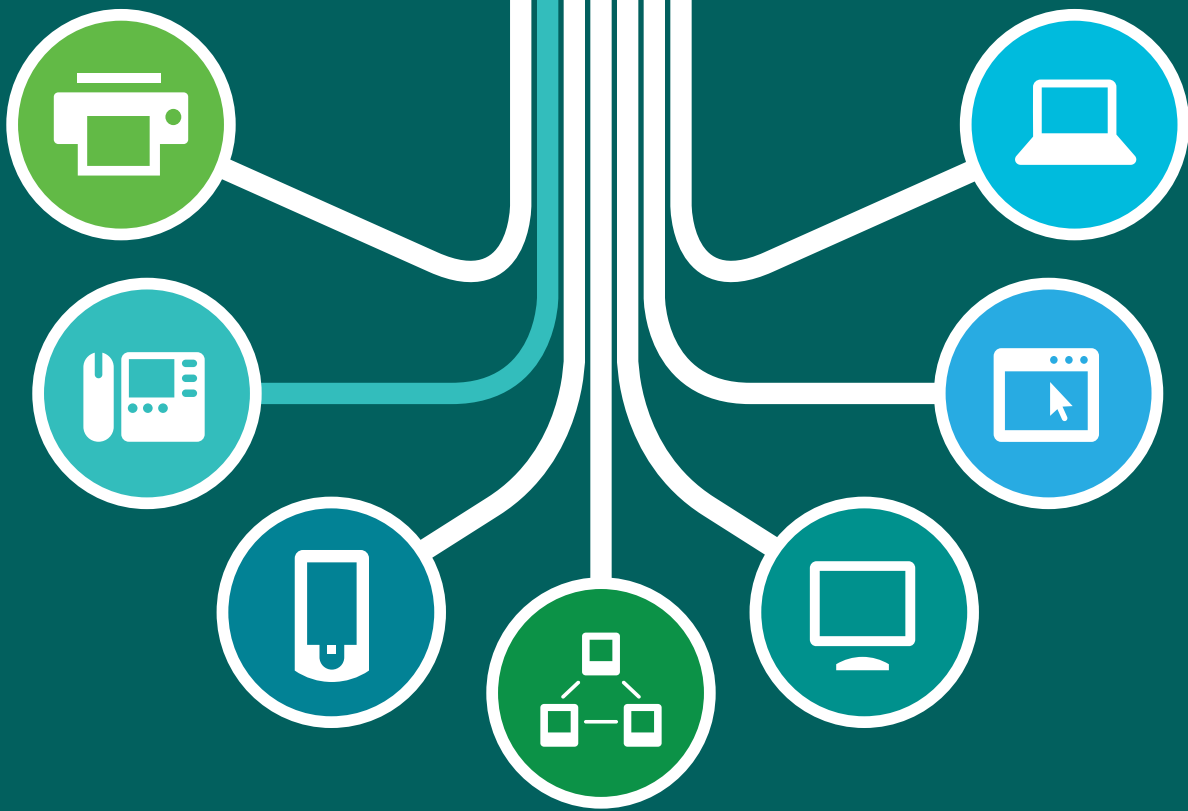
But over the years, you have seen more and more devices added to the network. Factor in any merger or acquisition, and you might be responsible for logging and tracking hundreds or even thousands of devices. The old, manual processes and spreadsheets are simply no longer up to the task.



If you are not already using software to speed up your inventory process, you need to be. Start by using scanners to capture device information. They log device data, such as product IDs, OS versions, and device location, and store it in an easily accessed central database.


This frees up time and improves data reliability, giving you a clearer view of network needs and simplifying any necessary troubleshooting with Technical Assistance Center (TAC) experts.





IT departments are dealing with more network devices than ever before, supporting an **average of 1,000 devices** per shift.³





The key to choosing the right tool is to make sure not only that it provides an accurate inventory of your assets, but also that it gives you visibility into the device information that matters most, such as:



Product ID, product family, service contract number, and device serial number: Capture this information so you can easily reference your coverage information, make sure affected devices are not beyond last day of support (LDoS), and identify which entitlements your coverage provides when talking with a TAC expert.



Device location: Some of the lengthiest and most easily avoidable delays come from incorrect or out-of-date information on building address and device location, slowing shipment of return materials authorizations (RMAs). Likewise, if service is needed, you want to be able to quickly locate the device needing repair.




OS version information: Speed up troubleshooting by making sure that the affected devices are running the latest OS.



Exceptions: Your TAC expert will ask whether alerts have been issued for the device, what exceptions have come up, and how you have addressed them.



IP address: Your representative might need to gain access to troubleshoot network conflicts.



This information will come in handy when you need to troubleshoot on your own or with TAC, and having these details will get RMAs in your hands more quickly.


2

Alerts

You can customize the network alerts you receive, so that you always have the information that is most important to maintaining your system. An important first step in getting the most from your alerts is determining which alerts apply to you and which point to issues that put your network at risk.

Investing some time in organizing and updating network alerts can make a world of difference. Here are some useful insights into **common alert types**, **prioritization**, and **tracking**.



80 percent of TAC calls have nothing to do with hardware. The overwhelming majority are requests for software support, operational questions, and other issues. 



Common Alerts

Make managing alerts easier by first dividing them into a few simple categories before deciding which are most critical to business needs. Typical alerts include:

Hardware alerts:

Hardware end-of-life and end-of-support reminders.

Software alerts:


Software end-of-engineering, end-of-life, and end-of-support reminders.

PSIRT alerts:

Product Security Incident Response Team. Security advisories, notifications of potential threats and vulnerabilities.

Field notice alerts:

Published notifications of significant product issues that typically require an upgrade, workaround, or other action.

Consistent device tracking and up-to-date maintenance reduce the duration of network outages by **40 percent**.⁴ 





Prioritizing Alerts

When it comes to prioritizing alerts, every team should have its own set of critical considerations. Here are some important factors that should make the list:

- Potential security vulnerabilities
- Importance of device to conducting business
- Service-level agreement (SLA) type (a comprehensive SLA often indicates device importance)
- Equipment replacement costs
- Device location
- Software and hardware lifecycle



Alerts Provide Four Pieces of Critical Information

- Which devices are affected

- Where to find detailed issue information

- Which devices or cards need to be replaced

- What actions you need to take, including replacement hardware and software options



Quick Tips for Tracking Alerts

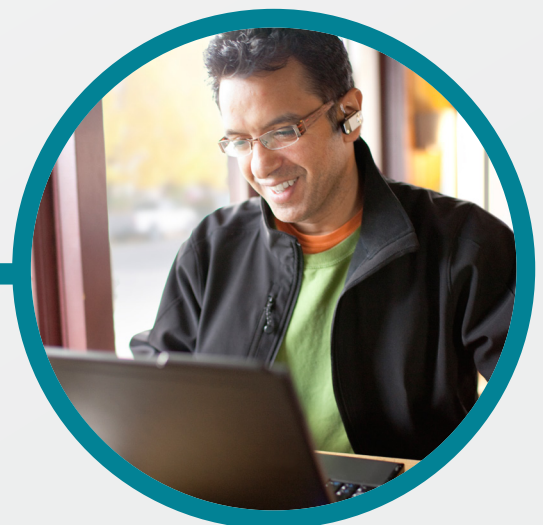
Develop a consistent process for reviewing alerts.

Prioritize alerts according to your specific business needs.

Tag alerts that can be resolved by workarounds or remediation, and provide a plan of attack.

Identify devices, cards, or software that need to be upgraded or replaced—and note any action taken.


Maintain detailed information, so other team members have important background on hand when addressing remediation steps or when TAC support is needed.

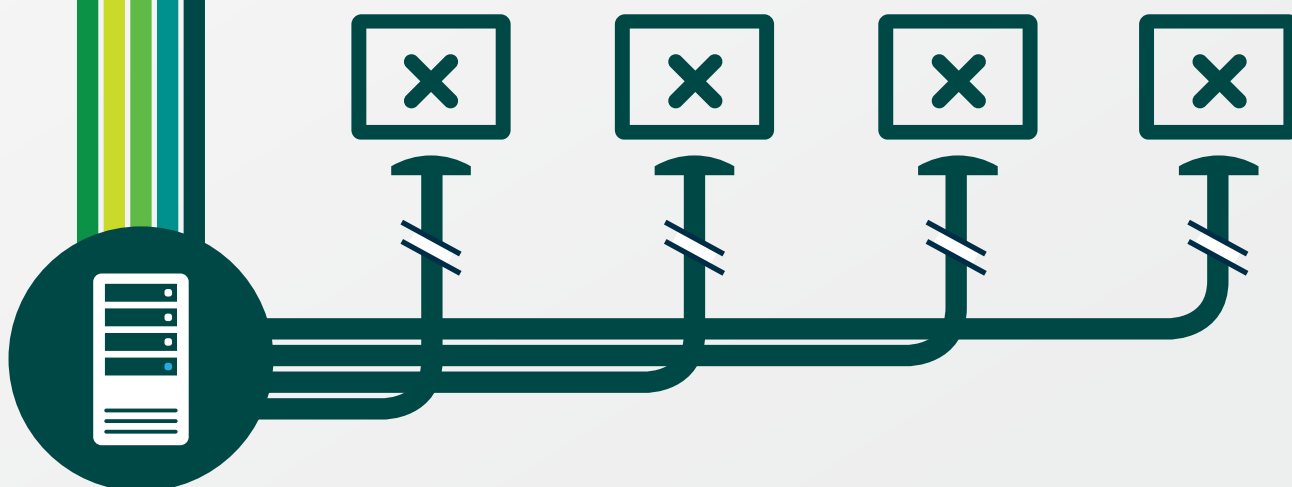


3

Contracts

Many TAC cases are a result of user error, but that is why you have product support coverage. There is so much more complexity in networks today, and neglecting coverage for devices critical to your business can result in preventable and costly downtime.

Network downtime costs the average company **\$42,000 an hour.**⁵ 



How do you determine the right coverage?

Let's take a quick look at the primary components of a service contract:

Remote technical support:

The ability to call for support at any time to get help with troubleshooting and usage issues.

Return Material Authorization (RMAs):

RMAs allow customers to return a product deemed to be defective and to receive a replacement based on the level of their service agreement.

Licensing for software and hardware:

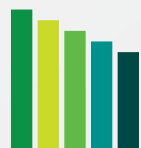
Some products require a license file to activate the software. In this case, after purchase, customers receive a product authorization key, which they register to receive their license.

Access to a website for support:

Access to information, tools, a knowledge base, and more allow users to get started on addressing problems—if not resolve issues themselves—without waiting for a call back from support personnel.

Software support:

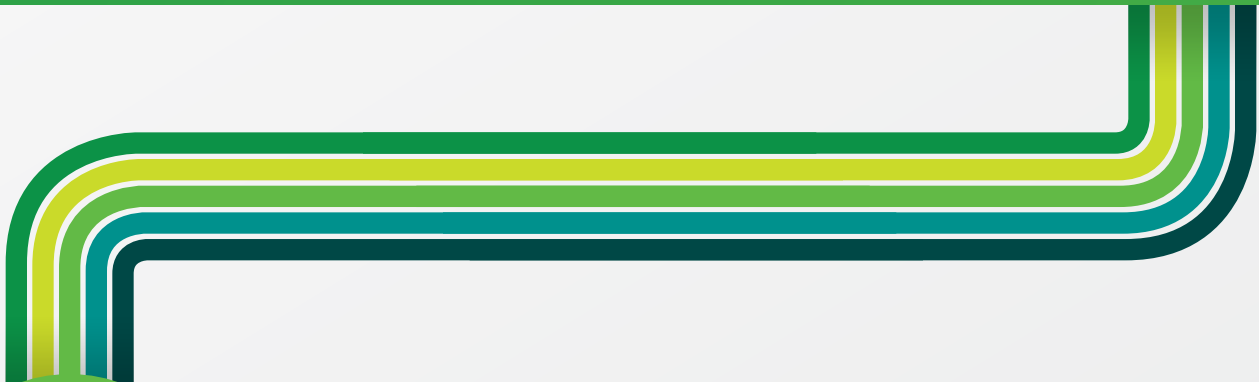
Customers receive application-specific software support, which might provide minor application releases to help maintain the network day to day, as well as support service for major application upgrades.





TAC tip:

Make sure you have the appropriate service-level agreement (SLA) in place to ensure timely device replacement and access to TAC.




On average, Cisco.com users are able to resolve 336,000 issues online each month (more than 4 million annually).



Service-Level Agreements

When determining the appropriate SLA for your devices, it is helpful to evaluate the relative importance of your devices by examining factors, such as cost, device location, software and hardware lifecycle, and risk of downtime. You can also contact your partners or service contract manager to help you standardize SLAs and reduce the number of SLAs you are managing.



Service Level by the Numbers

Service Level

Description

24x7x2

2-hour response, 24 hours a day,
7 days per week

24x7x4

4-hour response, 24 hours a day,
7 days per week

8x5x4

4-hour response, 8 hours a day
(9 a.m. to 5 p.m.) on business days

Next business day

The replacement will be delivered
the next business day



Entitlements

Entitlements are the specific set of privileges that go along with each service agreement. Familiarity with devices and entitlements helps your supplier provide faster, more accurate service based on actual hardware configuration and software versions.



Ease the process of verifying entitlements.

Here are some simple tips:

Keep service contracts up-to-date with moves, adds, and changes.

Make sure your profile is associated with all the appropriate service contract numbers.

Avoid using public email when contacting the TAC for service assistance. Use of public emails indicates possible TAC service abuse, so it might result in unnecessary delays.

Arrange inspection and relicensing of used hardware before adding it to service contracts.

Before downloading software, make sure the product involved is covered under a valid service contract.

Contact your partner or service account manager for helpful information about your current service agreements.

4

Budgeting and Planning

With a clear understanding of where network risk lies and which devices are near their last day of support, you can make smarter decisions on where to invest in device coverage, appropriately allocate funds to maintain critical devices, and avoid excess spending on devices that might not be critical to keeping the network up and running.

Analysts at Forrester Research point to two distinct benefits of proactive network management. One is keeping a reliable network at a lower cost in both staff hours and hardware and service contract investment. The other benefit comes in opportunity when you are freed up to anticipate and influence business demands.⁶



Do not let renewals sneak up on you.

Plan ahead for contract renewals, hardware refresh, and technology upgrades. This will help you avoid issues and budget for the appropriate level of coverage for each device in your network.

When developing your renewal plan, you should:


- 1 Identify** which devices are expiring in the next few months. When gathering information on devices for renewal, you will want to note product family, product ID, device ID, host name, IP address, sysname, serial number, ship data, contract number, coverage end date, coverage status, and service level.
Tip: It is easiest to start with sorting by product family or product ID.
- 2 Compare** this information with other device data. Cross-reference with LDoS data and find out when warranty coverage expires.
- 3 Evaluate** your coverage needs. If you have multiple service-level types, talk to your network engineer about renewal plans and how you can standardize service types.
- 4 Plan** for renewals or product refresh. After you have your renewal plan in place, contact your partner or account manager to finalize your renewal.



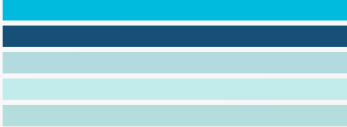
Proactive Management: Tools for Planning Ahead

You can also use this information gained from better network visibility to establish transparency of IT costs, find areas for consolidation and savings, and reinvest those savings into innovations and other critical IT projects.





Several tools can help you identify these areas:



Service dashboards:

An effective dashboard pulls together key information to help make projections about your network needs. This includes hardware and software alerts, inventory weaknesses and performance trends, service and coverage information, security alerts, and exceptions.


Vulnerability mapping tools:

Make informed budgeting decisions by identifying vulnerable parts of your network with tools, such as alert heat maps that develop a consolidated display of security threats, as well as devices most in need of hardware or software upgrade.

Simplified contract management:

Instead of managing multiple contracts with termination dates throughout the year, use contract management tools to identify contracts that can be consolidated, synchronize support dates, and bring your devices under the same coverage to budget smarter and save your team valuable time.

Using these tools, you can plan ahead more effectively. Instead of just putting out fires, you can project where problems might arise, set priorities, and put the processes in place to avoid issues or effectively manage them.



“[Through contract management tools] we have realized both time and cost savings...by reducing the number of service agreements by more than 50 percent.”

—Richard Pedler, Network Engineer, Aon



Now Trending:

Sleek Lifecycle Management

When the strategy for managing its installed base was not keeping up with its growth strategy, global design and retail firm **9 Kings** took a complete device inventory and began tracking relevant alerts in one central location. Now the company can better identify critical end-of-life or end-of-service dates and adjust its purchasing plans, making sure devices are covered and **saving on unnecessary expenses.**

5

Take the Next Step

If you are ready to improve your network support operations, we can help.

Cisco helps you automate device inventory management, so you can organize your network, filter and prioritize your alerts, and simplify your device coverage and contract processes.

Simplify your network operations so your team can achieve more.



Cisco Automation Tools

- ▶ **Cisco Active Advisor:** Free cloud-based service that provides essential lifecycle information about your network inventory
- ▶ **Smart Net Total Care:** Comprehensive inventory and contract management along with foundational technical services



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1. Dimension Data, “2014 Network Barometer Report”;
http://www.dimensiondata.com/Global/Global-Microsites/NetworkBarometer/Documents/assets/PDF/Network_Barometer_Report_2014.pdf
2. Gartner, “Top Seven Considerations for Configuration Management for Virtual and Cloud Infrastructures”;
http://img2.insight.com/graphics/no/info2/insight_art6.pdf
3. Gartner, “Critical Capabilities for Enterprise Endpoint Backup”;
<https://www.gartner.com/doc/2613020/critical-capabilities-enterprise-endpoint-backup>
4. Forrester, “The Total Economic Impact™ Of Cisco SMARTnet Service”;
http://www.cisco.com/en/US/services/ps2827/ps2978/services_cisco_smartnet_tei_study.pdf
5. NetStandard, “The Revenue Drain of Downtime”;
<http://www.netstandard.com/the-revenue-drain-of-downtime/>
6. Forrester, “‘Smart’ Services For Network Management Will Be Critical For Business Success In A Connected World”;
http://www.cisco.com/c/dam/en/us/services/collateral/services/data-center-services/forrester_tlp_for_cisco.pdf

