

INVENTORY SOFTWARE REVIEW

An Independent Review and Competitive Comparison

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Summary – “The aim of this review is to showcase best of breed Inventory products, highlight the key differentiators and innovation in the inventory tools space and give readers of The ITAM Review impartial market intelligence to enable informed purchasing decisions.”

INTRODUCTION

Trustworthy inventory information is fundamental to a successful IT Asset Management practice and underpins many different IT projects.

In a recent article I explained ‘6 Ways to Build a Business Case for Inventory and Auto-Discovery’. These ranged from defining IT strategy, financial management and supporting projects through to network security, support analytics and compliance. All of these projects rely on accurate inventory information that all stakeholders can trust.

The concepts of Inventory and Discovery go hand-in-hand. Inventory provides a global view of all IT assets the company owns and discovery enables the inputs and outputs to be factored into this global view. The goal is informed decisions based on up-to-date and accurate information.

- **Inventory:** A dynamic list of IT Assets available to the business (which maybe networked or stock). This may include the configuration details for each asset, a history of changes made to that asset and any relationships the asset has with other aspects of IT.
- **Auto-Discovery:** The process of discovering all assets on the network to ensure Inventory is accurate and includes all items. Auto-Discovery will help find new assets on the network, identify changes and ensure a network-wide view.

The aim of this review is to showcase best of breed Inventory products, highlight the key differentiators and innovation in the inventory tools space and give readers of The ITAM Review impartial market intelligence to enable informed purchasing decisions.

In particular, I am keen to highlight that innovation in this space is alive and well. Accurate and reliable inventory data is the cornerstone of any IT Asset Management practice and inventory should not be viewed as a commodity item. These technologies show how organizations can build and maintain an accurate view of their estate which will lead to many downstream benefits.

SUPPORTING ARTICLES & RESOURCES

- [Inventory & Discovery Tools Assessment Criteria – 48 Questions](#)
- [6 Ways to Build a Business Case for Inventory and Auto-Discovery](#)
- [Agent vs. Agentless](#)
- [Total Number of IT Assets – The Most Basic of Metrics](#)
- [Software Usage Monitoring and Work's Councils – It Can Be Done!](#)
- [Software Recognition – What's the Big Deal?](#)
- [Software Usage Monitoring](#)

MARKET POSITIONING

The table below provides a high level summary of the market positioning for each vendor.

The positioning refers to 'Primary' market sectors. This does not mean that vendors work in these sectors alone, but rather this is my opinion of where their key focus lies. For example iQuate are predominantly focussed on the datacenter but also discover desktops if required. Similarly FrontRange have many Enterprise level customers but their core market is Mid-Market.

Key Market Sectors are as follows:

- Desktop or DataCenter – Which environment is the primary focus for each vendor?
- Mid-Market – Organizations between 250 and 10,000 assets
- Enterprise – Organizations with greater than 10,000 assets

Vendor	Primary Market Focus		
	Environment	Mid-Market (250-10K)	Enterprise > 10K
BDNA	ALL		✓
FrontRange	ALL	✓	
HP	ALL		✓
iQuate	Datacenter		✓
Nexthink	Desktops		✓
Numara	ALL	✓	
ServiceNow	Datacenter		✓

COMPETITIVE OVERVIEW

The next table provides a high level overview of competitive differences between the tools.

- In a nutshell – A brief description of each technology
- Primary Purpose – Each technology may be used in different ways but this is the main purpose of the technology.
- Strengths – key positive points highlighted during the review
- Weaknesses – key negative points highlighted during the review

Vendor	In a nutshell...	Primary Purpose	Strengths	Weaknesses
BDNA	Cleans and adds market intelligence to discovered assets in large enterprises	Cleaning and understanding asset data	Appending business intelligence to discovered data. Rich Catalogue. Project-led data mining, Licensable status mapping.	Information source only. No relationship mapping. Oracle database.
FrontRange	Mature Inventory Solution covering all platforms	All-round inventory, SAM, Service Management	Auto-discovery, easy to use inventory, breadth of coverage.	Disjointed integrations. Falling behind.
HP	Highly configurable data collector for HP DDMI and HP Asset Manager	Populating CMDB or Asset Repository	Highly configurable agent deployment and scanning options, ISO/IEC 19770-2 Tags	Unremarkable. Limited reporting and analytics. Only becomes useful with other HP products.
iQuate	Collects complex server configurations details to support licensing decisions in the datacenter.	Datacenter License Management	Configurable Product Adaptors, Datacenter Focus, Time to Value - quick agentless visibility	Short on business intelligence.
Nexthink	Discovery and relationship mapping aimed at user satisfaction and application availability.	General desktop inventory, performance problem detection, Application performance and availability	Inventory on Steroids, Ease of Use, Great Reporting and Analysis, oriented towards provision of services	Cost, Windows only
Numara	IT Management Swiss Army Knife	All-round inventory, Policy Governance, IT Management	Versatile, Ease of Use, Value for Money, Ability to Take Action, Dynamic Groups and Visualisation.	~
	Enterprise-grade agentless discovery and relationship mapping for datacenters.	Populating the CMDB for Service Management	Versatile, Ease of Use, Bird's Eye View of Business Services, Enterprise Data Mashups	Application Recognition (Add/ Remove Progs.)

CUSTOMERS

Approximate number of customers for each product (as of Autumn 2011):

- BDNA ~ 200
- FrontRange Solutions Discovery ~ 2500
- HP DDMI ~ 500
- iQuate iQSonar ~ 30
- Nexthink ~ 170
- Numara ~ 900
- ServiceNow Discover ~ 150

DATABASE

Back-end database used for each vendor:

- BDNA – Oracle
- FrontRange Solutions – Microsoft SQL
- HP – MySQL
- iQuate – Microsoft SQL
- Nexthink – In-memory data SQLite. Web reporting PostgreSQL
- Numara Software – Microsoft SQL, Oracle, or PostgreSQL
- ServiceNow – MySQL

COMPETITIVE DIFFERENTIATORS

The table below includes some specific competitive differentiators between the different vendors. These features have been chosen specifically to demonstrate the different approaches, scope and methodologies for each vendor.

1. Green IT – Some tools provide information to support projects to reduce IT power consumption.
2. Physical Location – The ability to dynamically track the physical location of a device dependent on it's relationship with the Switch it is connected to. This is an automated process in some tools, a manual process in others.
3. End User Interactivity – For some countries it is a legal requirement to be able to interact with the audit process (See also '[Software Usage Monitoring and Work's Councils – It Can be Done!](#)').
4. Inventory Methodology – Deploying an agent to each device or interacting via the network (See also 'Agent vs Agentless')
5. Software Usage Monitoring – The ability to track whether software is being used. This only applies to tools using an agent, since it requires ongoing monitoring (See also 'Software Usage Monitoring').
6. Software Recognition Database – Comparison of what is found on the network to an internal database for interpretation (See also – '[Software Recognition – What's the Big Deal?](#)').
7. Relationship Mapping – The ability to present visual maps of the relationships and dependencies between assets.
8. Meta Data – The ability to append additional information to assets. This is especially important if an additional asset management tool is not being used. For example the ability to store purchase information or references to other systems.
9. Alerting – Some tools offer point in time analysis (What did things look like on Monday? what did things look like on Wednesday? Let's compare the difference.) and some tools offer an ongoing dynamic view of the estate and alert to changes.
10. Migration Support – Some tools offer scenario modeling which forecast compatibility with future platforms or builds. For example show me which assets in my estate are suitable for Windows 7.

		BDNA	FrontRange	HP	iQuate	Nexthink	Numara	ServiceNow
1	Business intelligence regarding power, power ratings or other metrics pertinent to Green IT projects?	Yes	No	No	No	No	Yes	No
2	Automatic Physical Location Tracking	No	Yes	No	No	No	No	No
3	End User Interactivity - Are users (whose machines are being audited) able to interact, interrupt or otherwise correspond with the audit process e.g. cancel the audit, fill in a form etc.	No	Yes	No	No	No	Yes	No
4	Inventory Methodology (agent, agentless)	Agentless	Agent	Agent or Agentless	Agent-less	Agent	Agent and Agentless	Agentless
5	Is Software Usage Monitoring Provided? Passive (Reporting) or Active (controlling use)	No	Passive	Passive	No	Passive	Active	No
6	Inbuilt Software Recognition Database	Yes	Yes	Yes	No	Yes	Yes	No
7	Does your software provide detail regarding asset relationships? (e.g. Mapping between devices, users, Apps, Networks, Services, Dependencies)	No	No	Yes	No	Yes	Yes	Yes
8	Storage of Non-networked information (e.g. Purchase date, PO number, Warranty, Org. Unit etc.)	No	Yes	No	No	Yes	Yes	Yes
9	Alerting	No	Yes	Yes	No	Yes	Yes	Yes
10	Features to assist with migration or upgrade projects?	Yes	Yes	No	No	Yes	Yes	No

BEST IN CLASS

Of the seven technologies reviewed I was particularly impressed with the following vendors:

- **BEST IN CLASS – MID-MARKET**- Numara FootPrints Inventory Manager and Compliance Manager
- **BEST IN CLASS – ENTERPRISE** – ServiceNow Discovery
- **BEST ALL TOOLS** – Numara FootPrints Inventory Manager and Compliance Manager

Video Overview ~ 25 Mins

[Inventory & Discovery Tools Group Test \[The ITAM Review\]](#)

DISCLAIMER, SCOPE & LIMITATIONS

The information contained in this review is based on sources and information believed to be accurate as of the time it was created. Therefore, the completeness and current accuracy of the information provided cannot be guaranteed. Readers should therefore use the contents of this review as a general guideline and not as the ultimate source of truth.

Similarly, this review is not based on rigorous and exhaustive technical study. The ITAM Review recommends that readers complete a thorough live evaluation before investing in technology.

This is paid review. That is, the vendors included in this review paid to participate in exchange for all results and analysis being published free of charge without registration. For further information please read the 'Group Tests' section on our [Disclosure page](#).

Introduction

The BDNA solution set consists of three main products:

- Discover – technology for agentless network discovery
- Normalize – the ability to import and cleanse inventory data from other systems
- Technopedia – a database of what BDNA call ‘market data’, a dynamic reference library of additional non-discoverable information regarding each discovered asset.



Infrastructure & Methodology

BDNA's aim is to provide an accurate baseline in which to feed other downstream systems.

Users begin with agentless discovery to find all assets on the network. The Discovery process includes three progressively deeper scans:

1. An initial light sweep of the network to identify the existence of assets
2. A more thorough discovery using non-admin rights to identify configurations and software
3. Finally, communication with specific applications to identify configurations, for example communicating with an Oracle database to identify a user table.

In addition to BDNA Discover, BDNA also offer Normalize, which allows organizations to import inventory from traditional agent based discovery systems such as SCCM, Altiris, and LANDesk etc. As the name suggests, Normalize cleans up and organizes third party inventory data so it can be converted into useful information.

BDNA Discover data can either provide the foundation of a specific project or campaign (such as an operating system migration, security analysis, energy reduction etc.) or can be used as a data feed to supply license management or configuration systems for service management.

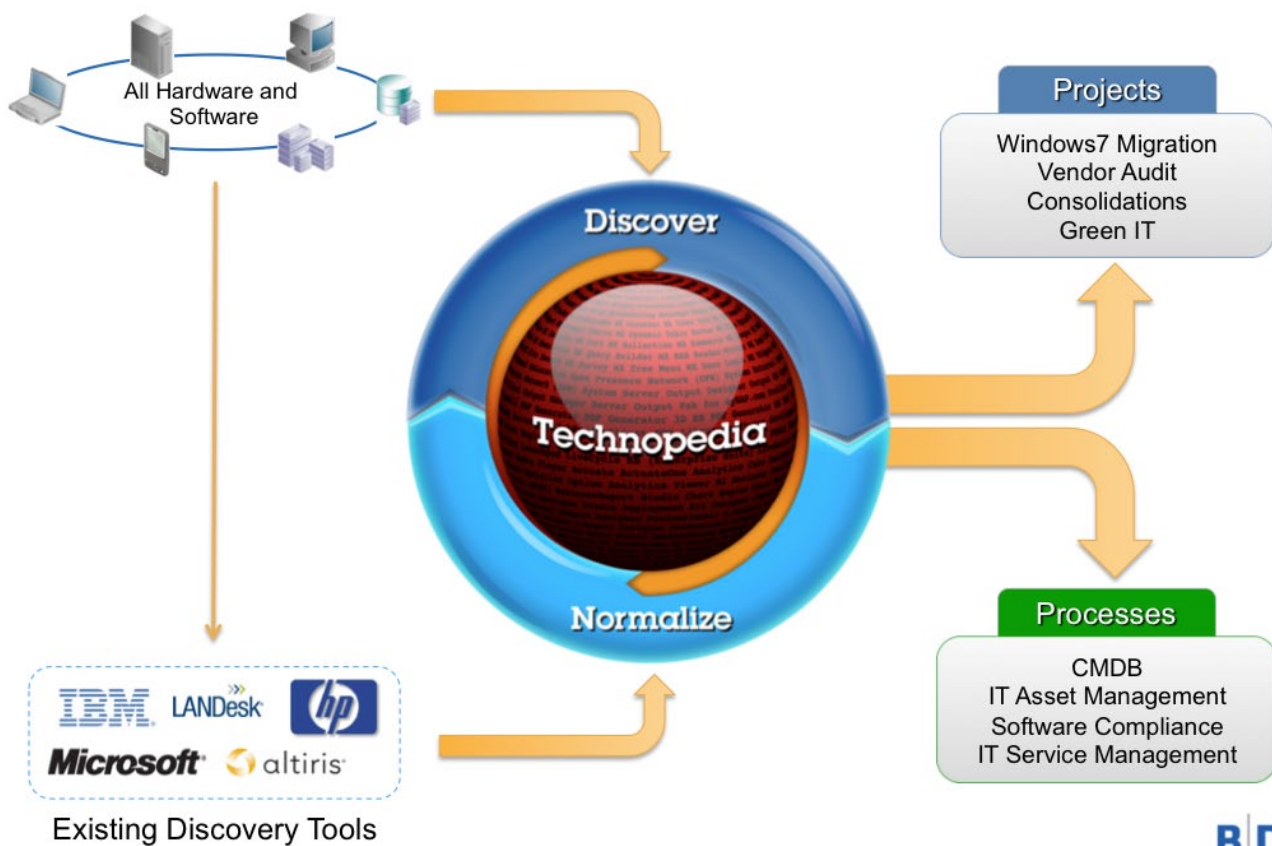
This technology is aimed at very large organizations with large chaotic networks that perhaps need an additional source of intelligence to compliment their existing mix of systems management tools.

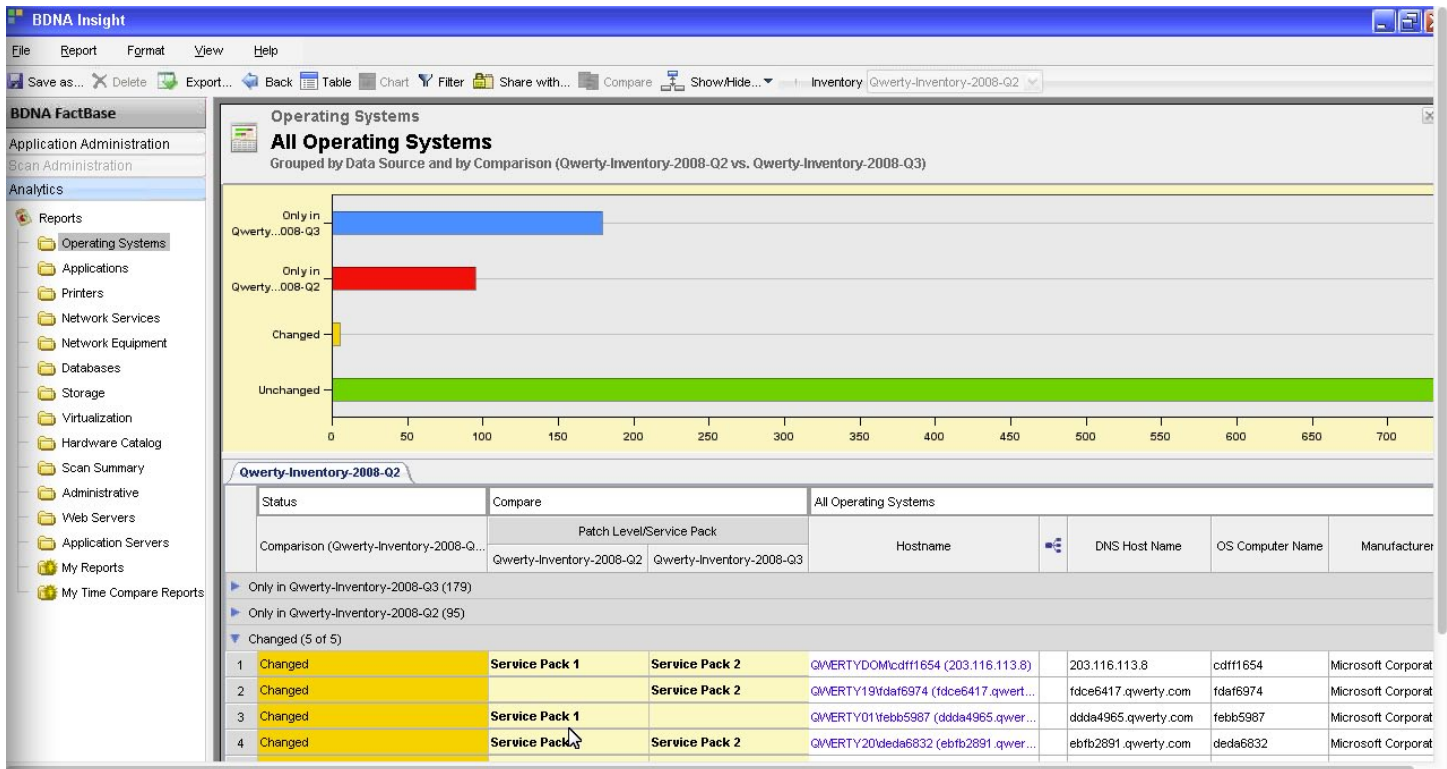
Administrators of the system can configure views, apply filters, roll-up columns and generally dice and splice the data. Comparisons can also be made between data sets; for example a user might compare the results from January and February in order to show:

- Show me the new assets
- Show the assets that disappeared during that time frame
- Show the assets that changed
- Show me the assets that stayed the same

Screenshots

Larger screenshots available online at: <http://www.itassetmanagement.net/inventory-discovery-tools-review>





BDNA Discover

File Report Format View Technopedia Help

Save as... Delete Export... Show/Hide Columns

BDNA Collection Store

Application Administration
Scan Administration

Analytics

Reports
Operating Systems
Applications
Printers
Network Services
Network Equipment
Databases
Storage
Virtualization
Technopedia
Scan Summary
Administrative
Web Servers
Application Servers
My Reports

Fingerprinted Applications on all OS / All Operating Systems / Groups

BDNA Discover		Technopedia		Application Type	
<input checked="" type="checkbox"/>	Discovered Data	<input type="checkbox"/>	Software Product Information		Ap
<input checked="" type="checkbox"/>	Hostname	<input checked="" type="checkbox"/>	Manufacturer	t	NetMeeting
<input checked="" type="checkbox"/>	OS Type	<input type="checkbox"/>	Product Family	t	NetMeeting
<input checked="" type="checkbox"/>	OS Family	<input checked="" type="checkbox"/>	Product Name	t	Internet Information Services ... 6.0.3
<input checked="" type="checkbox"/>	Application Name	<input type="checkbox"/>	Edition	t	Distributed Transaction Coord...
<input checked="" type="checkbox"/>	Application Manufacturer	<input type="checkbox"/>	Product Component	t	NetMeeting
<input checked="" type="checkbox"/>	Application Type	<input checked="" type="checkbox"/>	Version	t	.NET Compact Framework 2.0.7
<input checked="" type="checkbox"/>	Application Version	<input checked="" type="checkbox"/>	Market Version	t	.NET Compact Framework 3.5.7
<input checked="" type="checkbox"/>	Installation Directory	<input checked="" type="checkbox"/>	Is Licensable?	t	NetMeeting
<input checked="" type="checkbox"/>	Is Application Running	<input type="checkbox"/>	GA Date	t	Distributed Transaction Coord...
<input checked="" type="checkbox"/>	OS Edition	<input type="checkbox"/>	Category1	t	NetMeeting
<input checked="" type="checkbox"/>	OS Version	<input checked="" type="checkbox"/>	Category2	t	NetMeeting
<input checked="" type="checkbox"/>	Patch Level/Service Pack	<input type="checkbox"/>	Windows 7 Compatibility(32-Bit)	t	.NET Compact Framework 2.0.7
<input checked="" type="checkbox"/>	Number of CPUs	<input type="checkbox"/>	Windows 7 Compatibility Action(32-Bit)	t	.NET Compact Framework 3.5.7
<input checked="" type="checkbox"/>	# of Networks	<input type="checkbox"/>	Windows 7 Upgrade Path(32-Bit)	t	SQL Server Analysis Services 10.0
<input checked="" type="checkbox"/>	Networks	<input type="checkbox"/>	Windows 7 Compatibility(64-Bit)	t	SQL Server Reporting Services 10.0
<input checked="" type="checkbox"/>	# of IPs (Scanned)	<input checked="" type="checkbox"/>	Windows 7 Compatibility(64-Bit)	EAServer	5.2.C
<input checked="" type="checkbox"/>	IP(s) (Scanned)	<input checked="" type="checkbox"/>	Windows 7 Upgrade Path(64-Bit)	Replication Server	15.0
<input checked="" type="checkbox"/>	# of Divisions	<input type="checkbox"/>	Software Support Information	OpenSwitch	
<input checked="" type="checkbox"/>	Divisions	<input type="checkbox"/>	Current Support Level Name	c bv-Control for NDS eDirectory	8.60
<input checked="" type="checkbox"/>	# of Projects	<input type="checkbox"/>	End of Current Support (Mfg published)	c bv-Control for NetWare	8.60
				c Bindview bv-Control for Win...	8.60

Raw Data	SunOS 5.9	Hyperion CapPlan 5_1-d	sun4u SPARC SUNW
Manufacturer	Oracle	Oracle	Oracle
Family	--	Hyperion	--
Product	Solaris	Capital Planning	Sun Blade 100
Version	9	5.1	--
Category	OS > Unix	Application > Finance	Hardware > Servers
Power	--	--	455W
Support	Vintage Phase I	Premier	Current
End-of-Life	Nov 2012	August 2011	May 2013
Win7 Compat	--	Yes	--

Augmented Reality for IT Assets

In my opinion, the BDNA raison d'être and key competitive differentiator is 'Technopedia'.

In a nutshell, Technopedia cross references discovered assets with a library of additional information about that asset. If I find an old XP box on the network it will append additional meta-data to that asset based on collated market information. This is beyond the scope of the usual WMI requests and provides data on dimensions, power consumption, cores, PVU values etc.

Similarly if I find an application on the network Technopedia will apply additional intelligence about that application such as

- Does it need a license?
- What type of application is it?
- Is it compatible with Windows 7?
- Who is the current manufacturer?
- Has the vendor been acquired?
- When will the product become end of life?
- In what functional category does this application belong?
- Is it part of a suite and/or product family?

Some competitive vendors have collated this information in pockets but it is rare to see such a library of information with such depth and breadth. BDNA claim to have over 400,000 products listed and over 14.5 million data points.

Strengths

The recent addition of licensable status is a strong offering if organizations can harness the information correctly. In theory, organizations with existing large deployments of traditional systems management tools can feed the raw data through BDNA and quickly highlight licensable software for certain vendors. This may prove to be very useful for tactical software compliance projects.

Similarly BDNA can harness existing inventory data to underpin other tactical projects such as operating system migrations, hardware refreshes, virtualization consolidation projects, software consolidations and all-round cost cutting.

One of the main strengths of BDNA Normalize is that it enables organizations to align

information from their existing systems management applications to Technopedia without any additional infrastructure and leveraging existing tools.

Weaknesses

The backend components of the BDNA Discover system may be too onerous for some organizations; the whole system contains a Linux server, Windows server and Oracle database (The front end is a Java based web application).

BDNA does not provide any dependency or relationship mapping beyond linking virtual to physical hosts. Additionally some of BDNA Discover's agentless competitors provide more accessible and intuitive ways to cross-examine, visualize and take action on discovered data.

Finally, this is an information source only. Organizations making use of BDNA need to ensure they have an efficient way to integrate this actionable information into existing management applications (CMDBs, license compliance/mgmt systems, ITAM/ITSM, etc.) to get the most out of the information provided.

Product	BDNA Discover
Version	V7.5 (December 2010)
Methodology	Agentless Discovery
In a nutshell	Cleans and adds market intelligence to discovered assets in large enterprises
Customers	<ul style="list-style-type: none">• 200
Strengths	<ul style="list-style-type: none">• Appending Market Intelligence to Discovered Assets• Project-led data mining (Windows7 Upgrade, GreenIT, Compliance)• Licensable Status Mapping
Weaknesses	<ul style="list-style-type: none">• Information source only – the ability to take action on information• Access and Integration to Oracle Schema• No relationship mapping
References	<ul style="list-style-type: none">• Oracle• JPMorgan Chase• Wells Fargo
Primary Market Focus	<ul style="list-style-type: none">• Size: Large Chaotic Enterprises• Use: Cleaning and understanding asset data• Environment: Desktop & Datacenter
Pricing Model	Based on number of end-points. Priced as a perpetual, term or service license.

From the brochure:

“The scope of enterprise IT environments expands daily. The constant arrival of new devices, applications, technologies and users makes answering fundamental questions such as “How much...?” or “How many...?” a daunting task.

As organizations get mired in the complexity of simply gathering the appropriate data, decision makers are left with little confidence in the information upon which they must act. Clarify your vision of your entire IT estate with BDNA.

BDNA Discover provides the broadest and deepest visibility into all hardware and software deployed across the enterprise without the use of software agents. Leveraging Technopedia to discover, normalize and enrich your inventory, BDNA Discover delivers the most comprehensive and accurate picture of your IT infrastructure.

BDNA Discover is the ultimate “source for truth”, ensuring you can make confident decisions and have current, accurate information quickly to drive key initiatives and projects such as consolidations and license compliance.

Non-Intrusive: Without requiring software agents or administrative access, BDNA Discover deploys easily across any size organization and delivers value quickly.

Accurate: Leveraging Technopedia, BDNA Discover normalizes hardware and software information, ensuring you have the most up-to-date information to drive your key initiatives.

Comprehensive: BDNA Discover identifies all hardware and software as well as IP-enabled non-IT devices such as point-of-sale terminals, medical devices and manufacturing equipment to provide the most complete picture of the comprehensive IT estate.

Integrated: Through a well defined interface, the results from BDNA Discover embed seamlessly into production operations, ensuring strategic initiatives achieve their promise by leveraging high fidelity information.”

Links:

- [BDNA Discover Data Sheet](#)
- [White Paper: Understanding Discovery](#)
- [White Paper: Software Licensing \(check name\)](#)
- [Contact BDNA](#)

FrontRange Solutions

Introduction

FrontRange Discovery is a robust inventory and discovery solution for companies with multiple locations and multiple platforms.



FrontRange acquired this technology in 2008 from Centennial Software, whose heritage began with discovering items on the network with date related issues in preparation for the year 2000. So this product is mature, it's been around the block and it's had its wrinkles ironed out.

Neighbourhood Watch for Networks

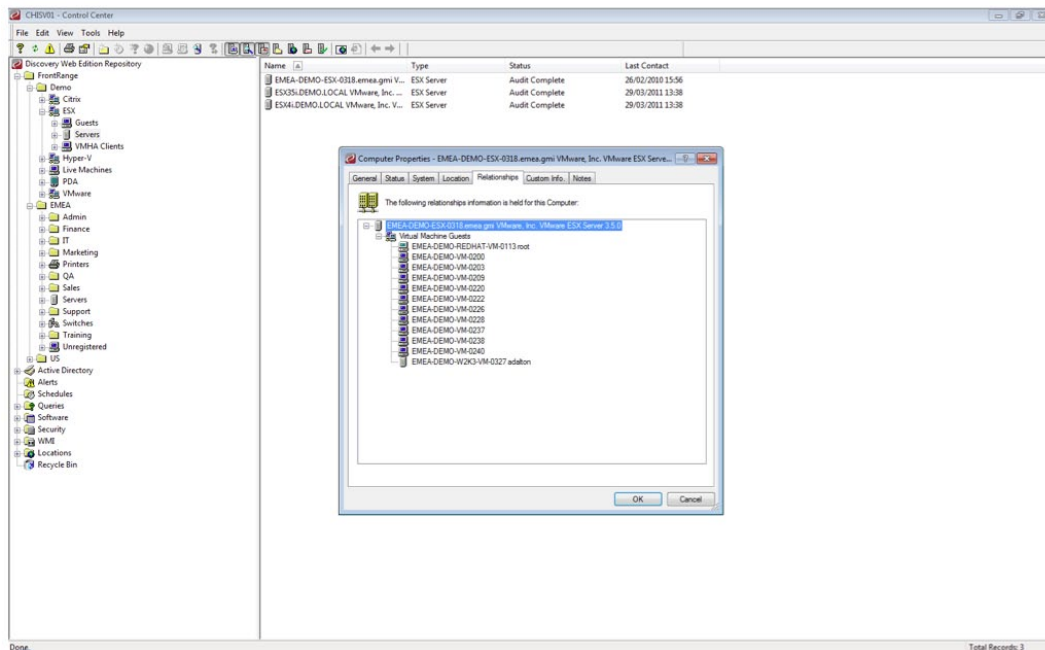
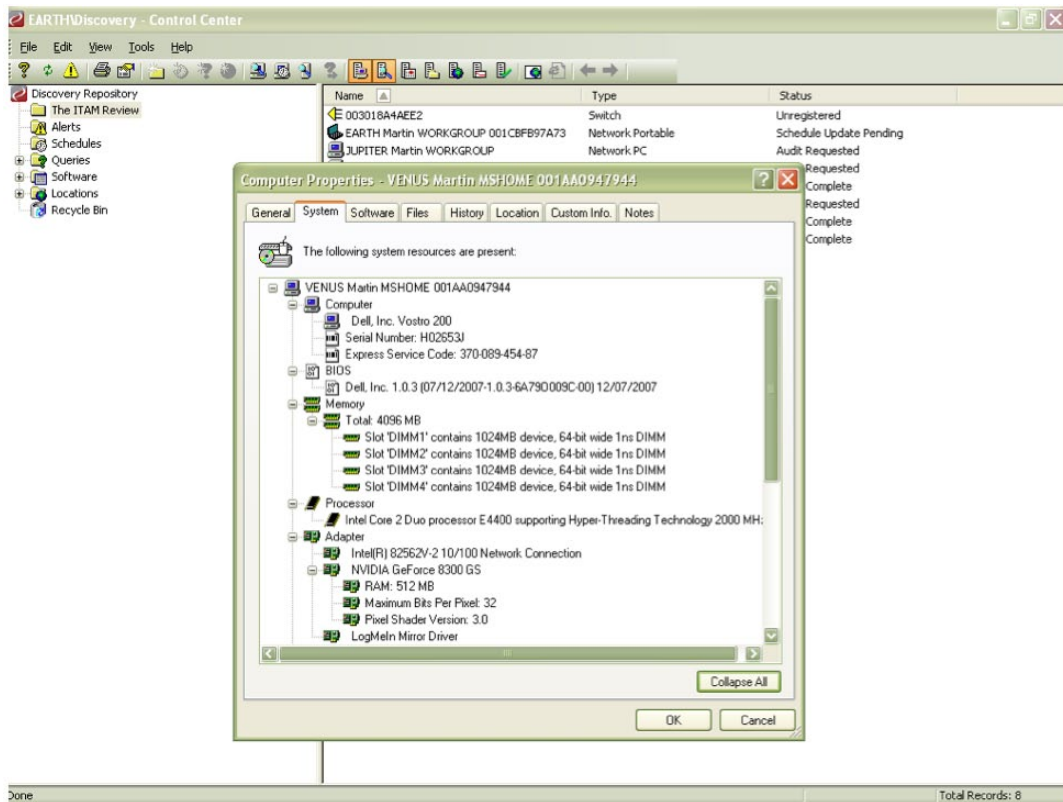
Centennial were pioneers in the use of auto-discovery to build an accurate picture of the network. Prior to auto-discovery administrators had to tell tools what to look for, which resulted in big holes in results and not very reliable inventory data.

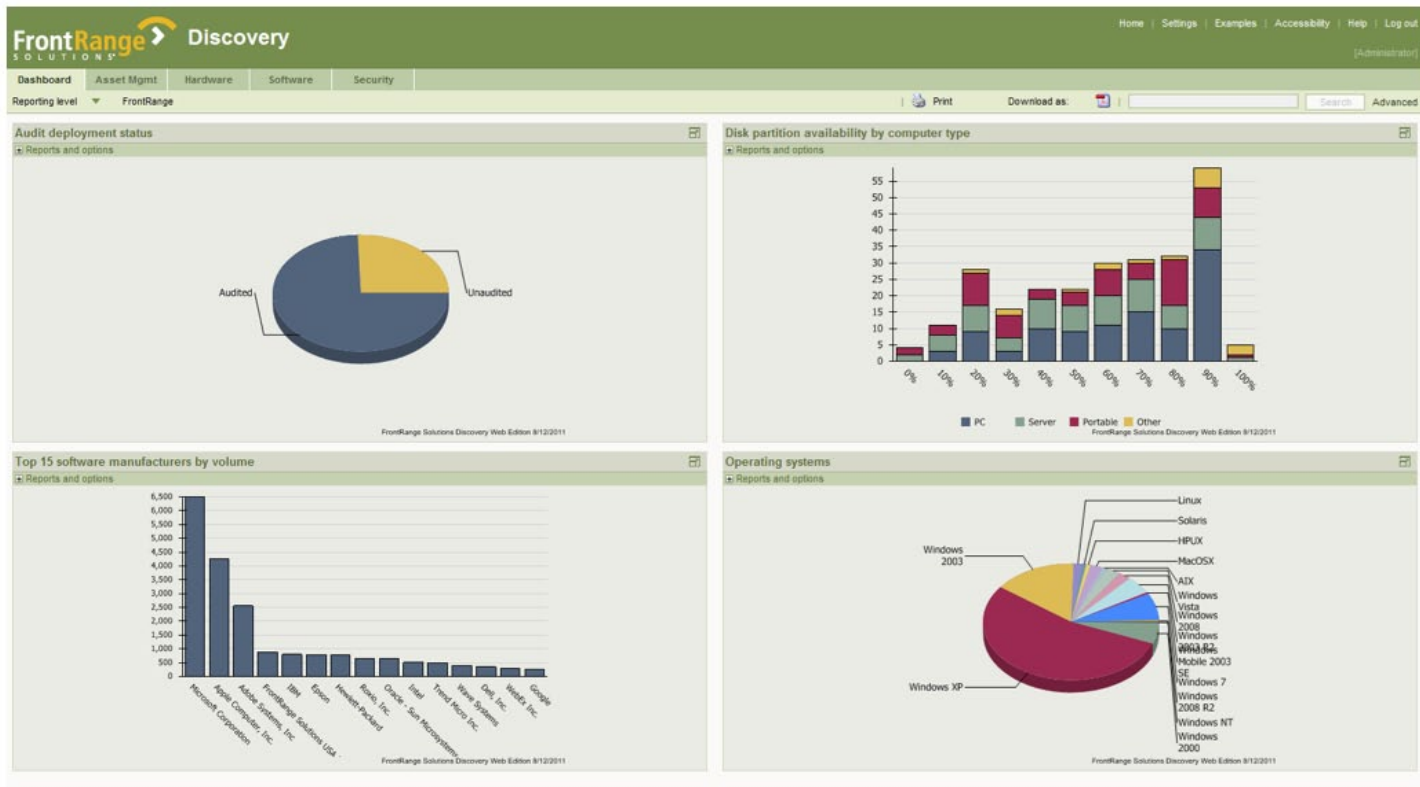
FrontRange use an agent to collect information on each device, and within each agent is listening technology, which informs the administrator of any changes in the local vicinity. It alerts administrators of newly identified machines without an agent, machines that have moved or changes in location. It's like having neighbourhood watch on the network and provides administrators peace of mind that their inventory data is up to date and accurate – a corner stone for successful IT Asset Management.

FrontRange Discovery has acquired a large footprint of worldwide customers because it does a good job of identifying everything on the network, 'It does what it says on the tin', it is easy to use and intuitive to manage and generate reports.

Screenshots

Larger screenshots available online at: <http://www.itassetmanagement.net/inventory-discovery-tools-review>





Impressive Coverage

FrontRange Discovery has an impressive coverage of both operating systems and platforms. It can audit desktops, servers, virtual systems, various networks and geographical locations – all using a lightweight touch and lean infrastructure.

Administrators of the system can build dashboards, management reports or perform bespoke queries to interrogate and build insights from their inventory data.

From Leader to Follower

There is no doubt FrontRange Discovery is an impressive offering as a standalone Discovery and auto-discovery solution. Its weakness is when administrators want to take action on the information they have found. This is particularly apparent when Discovery is compared to its competitors and I believe FrontRange has fallen a little behind in this respect.

FrontRange gives me a good picture of my estate, but I now need to action on that information, I need to begin processes to rectify or manage what I have found.

The FrontRange portfolio has grown through acquisition to expand its IT Asset and Service Management capabilities and Discovery data is available to these other components via integrations. FrontRange's competitors do a better job of linking logically and efficiently with the other segments of the IT Asset Lifecycle such as License Management, IMAC and Service Management, empowering user to take corrective action.

Similarly organizations looking to implement other FrontRange solutions alongside Discovery will need to install multiple agents and use multiple logins; some competitors to FrontRange use a single agent and a single login.

In summary: FrontRange Discovery is still a very good solution, but the market has caught up with this Pioneer.

Product	FrontRange Discovery
Version	9.1 (February 2011)
Methodology	Agent-based Discovery and Auto-Discovery
In a nutshell	Mature inventory solution covering all platforms.
Customers	<ul style="list-style-type: none"> • c. 2500
Strengths	<ul style="list-style-type: none"> • Auto-discovery • Market leading Inventory and configuration management detail • Aesthetics and general ease of use • Breadth of coverage – operating system and platforms
Weaknesses	<ul style="list-style-type: none"> • The ability to take action on information – weaker than competitors • Disjointed connections with other parts of the FrontRange offering
References	<ul style="list-style-type: none"> • BITMARCK Technik GmbH • Swisscom IT Services • Gloucester County Council
Primary Market Focus	<ul style="list-style-type: none"> • Size: Mid-Market 250 – 10,000 • Use: All round inventory, SAM, service management • Environment: Desktop to Datacenter
Pricing Model	Priced per agent. Available via perpetual, project license, subscription, SaaS. Prices start around \$20 per seat.

From the brochure:

“FrontRange IT Asset Management Software

Reduce Cost, Risk and Complexity with Unified Control of the IT Estate

FrontRange IT Asset Management solutions help organizations support business goals by optimizing the availability and cost-effectiveness of their IT assets, from Windows PCs through to Citrix and virtualized servers. FrontRange offers a unified approach to IT asset management, including key modules for:

- Network Discovery – Inventory all hardware on the network, full software audit
- Desktop Management – Centralized application & OS deployment, configuration management
- Software Asset Management – Integrated software audit, license management and application management
- Citrix Server Management – Automated Citrix server deployment and management
- Virtualization Management – Unified management for virtualized hardware and software assets

FrontRange IT Asset Management is ideal for organizations with growing, multi-platform distributed networks, helping to dramatically reduce manual workload and enabling IT staff to focus on adding value to business operations.”

Links:

- [FrontRange Discovery Product Page](#)
- [Contact FrontRange](#)
- [Product Evaluation](#)
- [Video Tour](#)

Introduction

It is fashionable for lean start-up software companies to bash large software corporations like HP. If you were to believe the marketing hype then you might be forgiven for thinking that HP Software solutions are archaic old dinosaurs ready to be put out to pasture – nothing could be further from the truth. I found HP's inventory offering; Discovery and Dependency Mapping Inventory (HP DDMI) to be modern and relevant – but not without its limitations.



Infrastructure and Methodology

HP DDMI is a browser based inventory tool that is powered by web server and MySQL database. It has a modern look and feel with traditional 'tree views' of options and hierarchies.

DDMI includes the most configurable agent deployment and scanning options I have ever seen across a wide array of supported platforms. Configuration options include agent behaviour, agent impact, network and device protocols, data collected, and methods of deployment and network environment options.

It might be argued that most of these configuration options will be lost on the vast majority of organizations, but if you manage a very bespoke network or a highly secure environment these options may prove valuable.

Software Recognition

HP DDMI V9.3 includes support for processing ISO / IEC 19770-2 SAM Standard Software Identification Tags. Whilst this is no great feat of software engineering I believe it is significant that an organization the size of HP is listening and responded to the market.

DDMI also includes a proprietary software library for recognizing software applications. At first glance DDMI does a good job at this, although not enough for full-blown license management. So an organization would need to use HP Asset Manager or another License Management facility if the primary interest in inventory was Software Asset Management.

Screenshots

Larger screenshots available online at: <http://www.itassetmanagement.net/inventory-discovery-tools-review>

The screenshot displays the HP Discovery and Dependency Mapping Inventory interface. The left sidebar contains a navigation tree with categories like Executive/Summary Network Reports, Scanned Device Reports, Software Inventory Reports, Application License Reports, Application Running Utilization Reports, Application Focus Utilization Reports, OS Reported Applications, Unrecognized Files, Devices with High Risk Files, Virtualization Reports, and VMware Reports. The main pane shows the 'ETM Server - Licenses by Application' report, which lists recognized applications found on scanned devices. The report includes a search bar, a table of applications with columns for Application (Description), Version (Description), Publisher, Licenses Required, and Installed. The table lists various applications such as Access (Microsoft Access), Acrobat Reader (Adobe Acrobat Reader), Active Perl, Administration Assistant for WinNT, Adobe Reader, AntiVirus, Apache HTTP Server, AssetCenter, AssetCenter API, AssetCenter DB Administrator, and AssetCenter Export.

ETM Server - Licenses by Application

ETM Server > Reports > Applications > By Application

This report lists all currently recognized applications found on your scanned devices. These applications are included in the Software Application Library.

Click an application name to view more detailed information about that application.

Number of applications: 179
Report data generated: Thursday, October 15, 2009 16:12:06 Pacific Daylight Time [Refresh Data]
Applications shown: 1 to 32
Skip to page: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 All

Index to application: A C D F G H I J M N O P S T U V W X

Find: [] contained in [] Application Name [] Search: [] Up [] Down [] Match case [] Invert match

Application (Description)	Version (Description)	Publisher	Licenses Required	Installed
Access (Microsoft Access)	xp sp3	Microsoft	0	1
Acrobat Reader (Adobe Acrobat Reader)	5.0	Adobe	1	1
Active Perl	5.8.8 build 819 DDMI	ActiveState Software	0	1
Administration Assistant for WinNT	9.2.0.1.0	Oracle	0	1
Adobe Reader	8.1.4	Adobe	1	1
AntiVirus	10.1.0396 ce	Symantec	1	1
Apache HTTP Server	2.0.54	The Apache Software Foundation	1	1
	2.2.10 DDMI	The Apache Software Foundation	0	1
	2.2.9	The Apache Software Foundation	1	1
	2.2.9 DDMI	The Apache Software Foundation	1	1
AssetCenter	3.50 sp1 (Build 1310)	Hewlett-Packard (Peregrine Systems)	1	1
	3.60 sp4	Hewlett-Packard (Peregrine Systems)	1	1
	4.00	Hewlett-Packard (Peregrine Systems)	1	1
	4.4	Hewlett-Packard (Peregrine Systems)	1	1
AssetCenter API	3.60 sp4	Hewlett-Packard (Peregrine Systems)	0	1
	4.3.1	Hewlett-Packard (Peregrine Systems)	0	1
	4.4.2	Hewlett-Packard (Peregrine Systems)	0	1
AssetCenter DB Administrator	3.60 sp4	Hewlett-Packard (Peregrine Systems)	0	1
	4.3.1	Hewlett-Packard (Peregrine Systems)	0	1
	4.4.2	Hewlett-Packard (Peregrine Systems)	0	1
AssetCenter Export	3.60 sp4	Hewlett-Packard (Peregrine Systems)	0	1
	4.3.1	Hewlett-Packard (Peregrine Systems)	0	1

DDM Inventory - VirtualCenter View

Scanned Device Reports

- Scanned Device Summaries
- Applications
- Unrecognized Files
- Microsoft Windows Vista Readiness

Virtualization Reports

- Virtual Devices
 - Solaris Zones Report
 - Solaris Zones
 - VMware Reports
 - VMware Virtual Machines
 - VMware VirtualCenter**

Mobile Device Reports

- Mobile Devices

WAN Reports

- Frame Relay
- Point to Point Serial
- Serial to Service Provider Network
- Digital Subscriber Line (DSL)
- ATM
- WAN Wide

LAN Reports

- LAN Backbone
- FDDI
- Token Ring

Device Reports

- Servers
- Routers
- Input and Output Devices
- Resource Managed Workstations

Number of VirtualCenter servers: 2

Number of VMware hosts: 5

Report data generated: Friday, September 19, 2008 09:15:49 Eastern Daylight Time [\[Refresh Data\]](#)

VM hosts shown: 1 to 6 on page 1 of 1

VirtualCenter Server

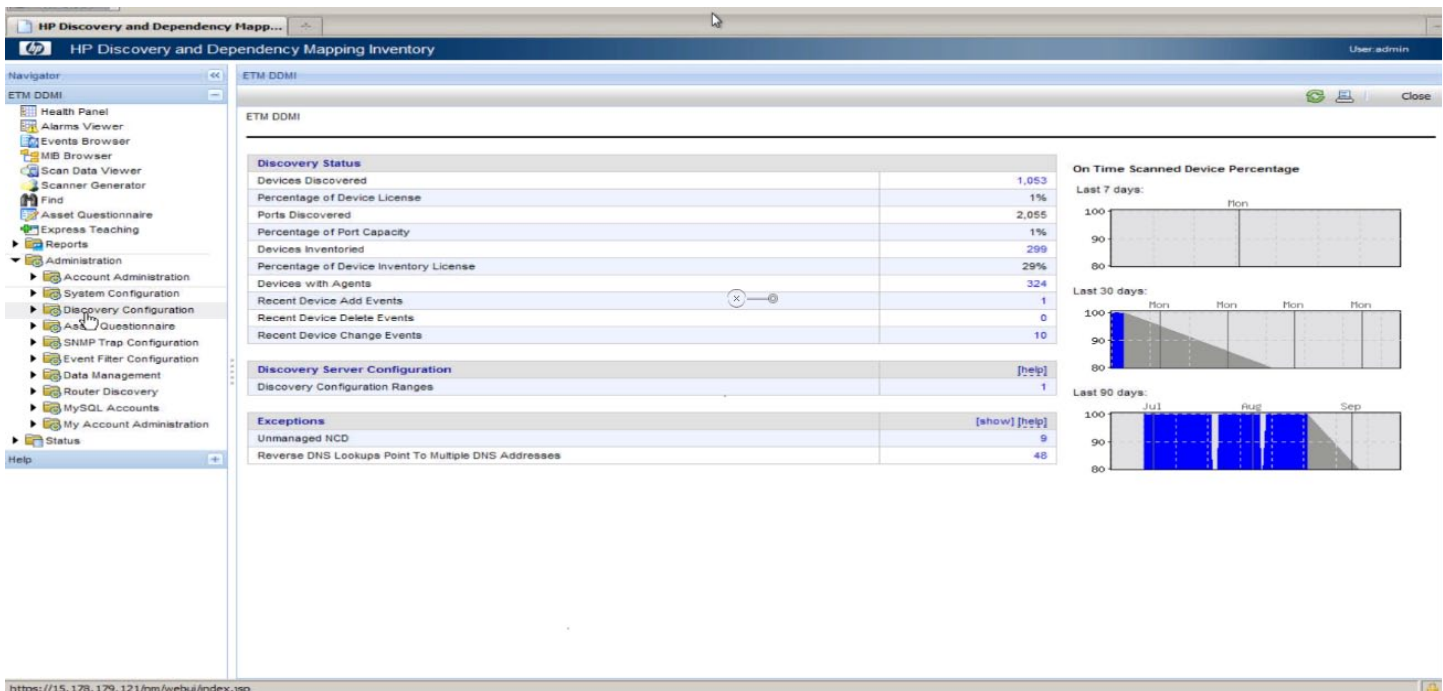
Device	Server	Version	Platform	UUID	Update Time
vmwar_host1 / 15.178.180.105 VM VC	VMware VirtualCenter	2.5.0	win32-x86		2008-09-11 05:00

VMware Hosts

Device	Server	Version	Platform	Model	UUID	VM Count	Update Time
15.178.180.230 ESX 3i	VMware ESX Server 3i	3.5.0	vmnix-x86	ProLiant DL360 G4p	33383030-3738-5553-4d35-31393032354d	5	2008-09-17 02:03
QAESX35 / 15.178.180.29 ESX 3.5.0 Location: "DDMI QALab"	VMware ESX Server	3.5.0	vmnix-x86	ProLiant DL360 G5	34353739-3233-4d58-5138-303741313856	16	2008-09-19 05:30
berserk.ottawalab.can.hp.com / 15.178.181.80 ESX 3.0.2	VMware ESX Server	3.0.2	vmnix-x86	ProLiant DL385 G1	34313133-3631-5553-4d37-32373030504d	31	2008-09-19 05:39
15.178.180.34 ESX 3.5.0	VMware ESX Server	3.5.0	vmnix-x86	ProLiant DL360 G5	34353739-3233-4d58-5138-313341305558	21	2008-09-19 05:38
sandy.ottawalab.can.hp.com / 15.178.180.200 ESX 3.0.1	VMware ESX Server	3.0.1	vmnix-x86	ProLiant DL385 G1	34313133-3631-5553-4d37-303330315742	16	2008-09-19 05:38

VirtualCenter Server

Device	Server	Version	Platform	UUID	Update Time
W2K3_RRS_510 / 15.178.181.75 Win 2003 Server	VMware VirtualCenter	2.5.0	win32-x86		2008-08-19 12:25



HP Discovery and Dependency Mapping - Device Manager - EPM DDM - Mozilla Firefox

Unmanaged device: Windows 2003 Enterprise Server (Win 2003 Server)
amsdbryan-01.labs.peregrine.com / 15.178.179.224
priority 3

Parameter	Value
UNSPSC description:	Computer servers
Operating system:	Windows 2003 Server Enterprise Edition Service Pack 2
Operating system current manufacturer:	Microsoft Corp
UNSPSC operating system:	Operating environment software
Hardware manufacturer:	VMware Inc
VM type:	VMware
VM name:	amsdbryan-01
VM operating system:	Microsoft Windows Server 2003, Enterprise Edition (32-bit)
VM status:	running
VM path:	[AM01] amsdbryan-01/amsdbryan-01.vmx
VM UUID:	4238e825-13e1-4e97-7d43-f1858f33abb0
VM host:	15.178.179.44
Asset tag:	AMSDBRYAN-01_005056B83F2D
BIOS asset tag:	VMware-42 38 e8 25 13 e1 4e 97-7d 43 f1 85 8f 33 ab b0
BIOS product name:	VMware Virtual Platform
BIOS product manufacturer:	VMware, Inc.
BIOS serial number:	VMware-42 38 e8 25 13 e1 4e 97-7d 43 f1 85 8f 33 ab b0
BIOS chassis:	Other
CPU:	Xeon 3000 MHz (GenuineIntel)
Computer name (hostname):	AMSDBRYAN-01

Scanning stage	Current status
[unknown]	exit: rc = 0 (SUCCESS)
[unknown]	exit: rc = 0 (SUCCESS)
[unknown]	exit: rc = 0 (SUCCESS)
[unknown]	exit: rc = 0 (SUCCESS)
[unknown]	exit: rc = 0 (SUCCESS)
[unknown]	exit: rc = 0 (SUCCESS)

Device	Host	Priority	IP Address	Discovery Date	Discovery Time	Discovery Status	Discovery Error	Discovery Count	Discovery Exit	Discovery Status
Server	amsdbryan-01.labs.peregrine.com	3	9.30.000.2244	2011-09-13 02:45	17 seconds	Success		10442	Exit	exit: rc = 0 (SUCCESS)
Solaris V10	armagh.labs.peregrine.com	3	9.30.000.2244	2011-09-13 02:45	0 seconds	Failed: Another scanner instance is running		10442	Exit	exit: rc = 6
ProLiant	arnold.labs.peregrine.com	3	9.30.000.2244	2011-09-13 02:50	1 hour 15	Success		2836	[unknown]	exit: rc = 0 (SUCCESS)

HP Universal CMDB (http://16.89.27.69:8080/ucmdb-ui/) - Windows Internet Explorer

HP Universal CMDB (http://16.89.27.69:8080/ucmdb-ui/applet/applet.jsp)

Universal CMDB

User: admin Customer: Default Client (Actual)

Resources | CI selector | CI Types

Resource Type: Views

Mainframe Host Resources

Query Definition

Legend: Contact Node Has Conditions Has Identifiers Invisible Model Output & Subgraph

Attributes Cardinality Qualifiers Data Sources Selected Identifiers Details

There are no items in this view.

Local intranet | Protected Mode: Off

Standalone versus Suite

The real limitation with DDMI is within reporting and analysis once data has been collected. DDMI only really becomes useful if an organization is fully committed to either HP Asset Manager or HP UCMDB, in which case it becomes a highly configurable data collector to feed these systems. Without these other components to hand, other competitors who offer more value overshadow DDMI.

Dependency Mapping

DDMI is accompanied by HP Discovery and Dependency Mapping Advanced (HP DDMA), which provides detailed mapping of how all of the individual components within an IT environment are related. The scenario modeling and impact analysis are particularly useful to predict the impact of certain incidents, although competitors in this review provided better overviews of business services and were more intuitive and easy to use. HP DDMA uses the HP UCMDB as a central repository; so again, you need to be fully committed to HP to make full use of this technology.

Product	HP Discovery & Dependency Mapping Inventory (HP DDMI)
Version	V 9.3
Methodology	Agent or Agentless Discovery
In a nutshell	Highly configurable data collector for HP CMDB and Asset Manager
Customers	<ul style="list-style-type: none">• 500
Strengths	<ul style="list-style-type: none">• Highly configurable agent deployment and scanning options• Processing of ISO/IEC 19770-2 Software ID Tags
Weaknesses	<ul style="list-style-type: none">• Unremarkable as a standalone product• Limited reporting and analysis• Only becomes useful with other HP components (Asset Manager or UCMDB)
References	<ul style="list-style-type: none">• Equifax• SAP• Principal Financial
Primary Market Focus	<ul style="list-style-type: none">• Size: Large Enterprises• Use: Populating the CMDB or Asset Management Repository• Environment: Desktop and Datacenter
Pricing Model	Not disclosed

From the brochure:

“Discovery and Dependency Mapping Inventory (DDMI) provides information about IT managed assets.

It combines discovery with comprehensive hardware and software installation and usage data to support asset management, service management and configuration management solutions. “

Links:

- [HP Discovery & Dependency Mapping Inventory \(HP DDMI\) Product Page](#)
- [HP Discovery & Dependency Mapping Advanced \(HP DDMA\) Product Page](#)

Introduction

iQSonar from iQuate is a discovery and inventory solution for complex server environments.



iQuate have a sole focus of agentless inventory of servers and position themselves as a tactical enhancement to other tools being used by an organization. iQuate clients feed data generated by iQSonar into downstream license management or configuration systems.

SAM in the Data Center

iQuate argue that historically the majority of Software Asset Management (SAM) efforts have been focused on the desktop, whereby the majority of cost is in the datacenter.

Organizations may have change control programs in place for the data center compared to the comparative unknown of desktops. However the primary concern of those responsible for change control in the datacenter is keeping the lights and maintaining service. Contemplating the licensing implications of any changes made to systems is not always a top priority.

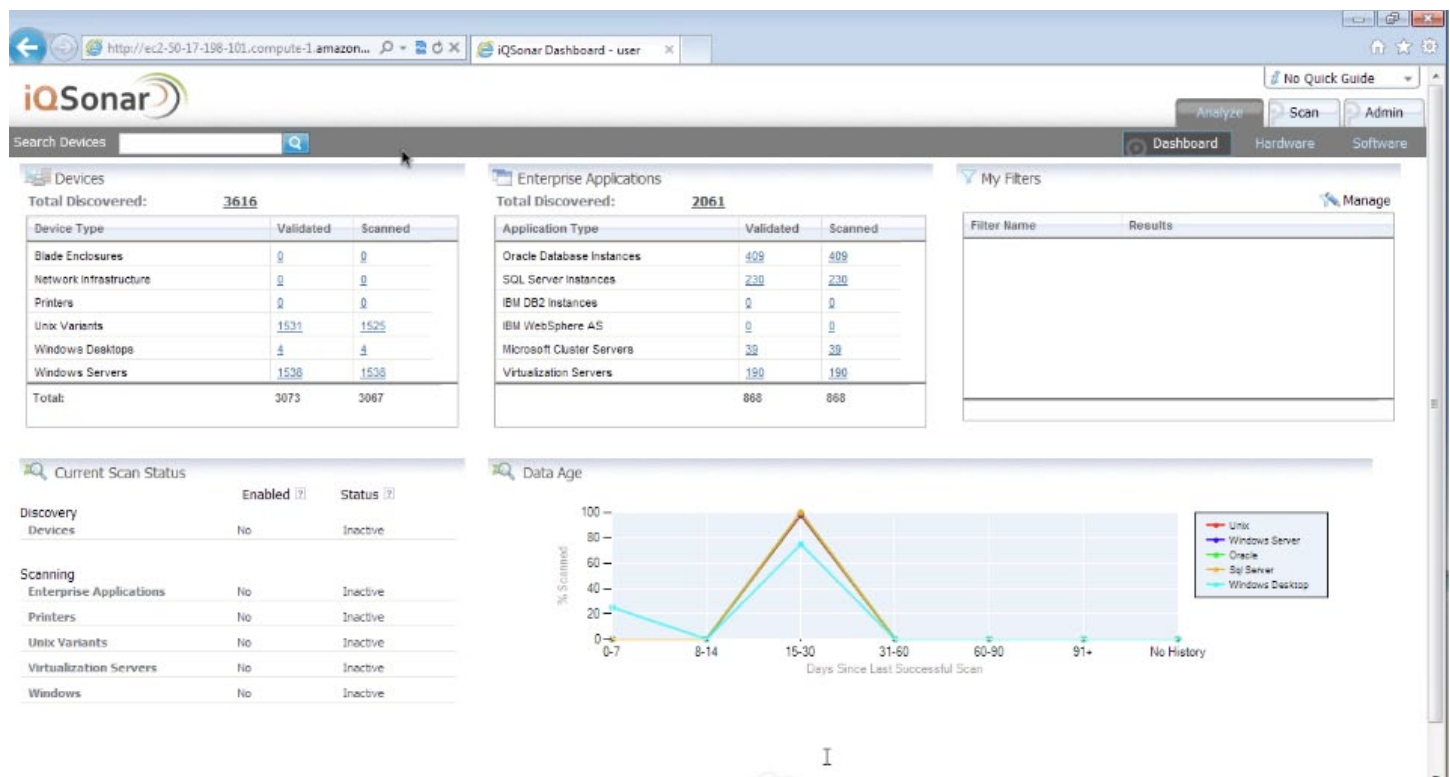
If successful SAM in the datacenter is where licensing savvy meets change control – then iQuate’s mission is to provide accurate data to underpin that savvy.

Desktop SAM tools count installs to measure compliance (e.g. Microsoft and Adobe desktop products). For the datacenter configurations are paramount (e.g. User profiles for SAP, hardware configurations for IBM, database settings for Oracle). iQuate goes beyond average inventory and discovery tools and delves into these configuration settings.

At the high end, making slight changes to server settings, say 16 to 32 cores, has huge impact on costs that can overshadow desktop spend and iQuate have focused their efforts in this niche.

Screenshots

Larger screenshots available online at: <http://www.itassetmanagement.net/inventory-discovery-tools-review>



IQSONAR – DESIGNED FOR COMPLEXITY



iQSonar No Quick Guide

Search Devices Oracle Database Instances

Oracle Ora003272@IREUX09703

ORACLE[®] 10^g ENTERPRISE EDITION DATABASE

Overview

Options and Packs

Instance Information

Session Information

User Information

Host Name: [IREUX09703](#)

Instance Name: **Ora003272**

Port: **1521**

Build Number: **10.2.0.4.0**

Scan IP: **165.72.163.164**

Options Installed? **Yes**

EM Packs Installed? **No**

Options in Use? **No**

EM Packs Agreed? **No**

Number of DBA Users: **15**

Operating System: **Linux**

Service Pack/Release: **Red Hat Enterprise Linux Server release 5.3 (Tikanga)**

Number of CPU's: **2**

Virtual CPUs: **1**

CPU Manufacturer: **GenuineIntel**

CPU Model: **Intel(R) Xeon(R) CPU X7460 @ 2.66GHz**

Processor Factor: **0.5**

Device Manufacturer: **HP**

Device Model: **ProLiant DL580 G5**

Virtualization Platform: **VMware**

Physical Server: [IREUX08587](#)

Total Physical CPUs: **3**

Total Physical Cores: **18**

Validated and fully scanned

Troubleshooting Information

View All Details

Physical Hostname Virtual Host

IREUX08581	IREUX09723
IREUX08585	IREUX09800
IREUX08586	IREUX09657
IREUX08586	IREUX09669
IREUX08586	IREUX09670
IREUX08586	IREUX09689
IREUX08586	IREUX09686
IREUX08586	IREUX09707
IREUX08586	IREUX09772
IREUX08587	IREUX09635
IREUX08587	IREUX09703
IREUX08587	IREUX09703
IREUX08587	IREUX09730
IREUX08587	IREUX09652
IREUX08598	
IREUX08605	
IREUX08627	
IREUX08627	
IREUX08633	
IREUX08641	

Items to show: 20

iQSonar No Quick Guide

Search Devices Virtualization Servers

Virtualization Validated

VMware Virtualization (IEDUBESX027)

General

Application Credential History

Application Scan History

Cluster

Datastores

Virtual Device

Guest Label Host Name Guest Description Is Running IP Address Memory All

IEDUBWIN3172	IEDUBWIN3172	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.220	2048
IEDUBWIN3115	IEDUBWIN3115	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.156	2048
IEDUBWIN3112	IEDUBWIN3112	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.153	1024
IEDUBWIN3111	IEDUBWIN3111	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.152	2048
IEDUBWIN3082	IEDUBWIN3082	Microsoft Windows Server 2003, Enterprise Edition	True	165.72.73.137	2048
IEDUBWIN3064	IEDUBWIN3064	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.119	1024
IEDUBWIN3057	IEDUBWIN3057	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.113	2048
IEDUBWIN3025	IEDUBWIN3025	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.92	2048
IEDUBWIN3008	IEDUBWIN3008	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.87	4096
IEDUBWIN2940	IEDUBWIN2940	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.65	4096
IEDUBWIN2901	IEDUBWIN2901	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.61	4096
IEDUBWIN2871	IEDUBWIN2871	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.42	4096
IEDUBWIN2848	IEDUBWIN2848	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.29	4096
IEDUBWIN2810	IEDUBWIN2810	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.16	2048
IEDUBWIN2809	IEDUBWIN2809	Microsoft Windows Server 2003, Standard Edition	True	165.72.73.15	2048
IEDUBWIN2803	IEDUBWIN2803	Microsoft Windows Server 2003, Standard Edition	True	165.72.66.106	2048
IEDUBWIN2773	IEDUBWIN2773	Microsoft Windows Server 2003, Standard Edition	True	165.72.66.203	4096
IEDUBWIN2758	IEDUBWIN2758	Microsoft Windows Server 2003, Standard Edition	True	165.72.66.225	4096

Items to show: 20

iQSonar No Quick Guide

Search Devices Analyze Scan Admin

Virtualization Servers

Vendor	Physical Hostname	Cluster Name
VMware	IREUX08556	DUBPRD1
VMware	IREUX08557	DUBPRD1
VMware	IREUX08558	DUBPRD2
VMware	IREUX08559	DUBPRD2
VMware	IREUX08570	DUBTEST1
VMware	IREUX08571	DUBTEST1
VMware	IREUX08572	DUBTEST1
VMware	IREUX08573	DUBTEST1
VMware	IREUX08574	DUBTEST1
VMware	IREUX08575	DUBTEST1
VMware	IREUX08576	DUBTEST1
VMware	IREUX08577	DUBTEST1
VMware	IREUX08578	DUBTEST1
VMware	IREUX08579	DUBTEST1
VMware	IREUX08580	DUBTEST1
VMware	IREUX08581	DUBTEST1
VMware	IREUX08582	DUBTEST1
VMware	IREUX08583	DUBTEST1
VMware	IREUX08584	DUBTEST1
VMware	IREUX08585	SJEPDR1

VMware Virtualization (IREUX08558)

General	VMware Virtualization (IREUX08558)
Application Credential History	
Application Scan History	
Cluster	
Datastores	
Virtual Device	

Application

Data Refresh (days): 3

Debug Expiry Date:

Out Of Scope: False

Path Name:

Scan IP: 165.72.134.30

Application ESX

Is CPU Memory Resource Config Supported: True

Is NFS Supported: True

Is NIC Teaming Supported: True

Is SAN Supported: True

Is V Motion Enabled: False

Is V Motion Supported: True

Is VLAN Tagging Supported: True

Isi SCSI Supported: True

Max Running VM: 1200

Max Supported Virtual CPU: 0

Max Supported Virtual Machine: 1200

Application ESX Cluster

Cluster Name: DUBPRD2

iQSonar No Quick Guide

Search Devices Troubleshooting Credentials IP Discovery Services Scan Control Admin

Derived Software

Vendor	Name	Count
IBM	Cognos	2
IBM	Cognos Contributor	1
IBM	Cognos Go! Dashboard	1
IBM	Cognos Impromptu	2
IBM	Cognos Planning	2
IBM	Cognos PowerPlay	2
IBM	Cognos ReportNet	1
IBM	Cognos Visualizer	1
IBM	CommonStore	1
IBM	DB2	3
IBM	DB2 Application Development Client	1
IBM	DB2 Connect	1
IBM	FileNet Application Engine	1
IBM	FileNet Content Engine	1
IBM	FileNet Content Federation	1
IBM	FileNet eForms for P8	1
IBM	FileNet IDM Desktop	1
IBM	FileNet IDM Web Controls	1
IBM	FileNet Image Services	1
IBM	FileNet Process Engine	1

Items to show: 20



The Virtual System Admin

iQuate use Product Adaptors to collect configuration details for applications. The Product Adaptors allow commands and algorithms to be run in order to collect the information required for licensing. These adaptors operate much like a virtual systems administrator, running commands and performing algorithms on an automated basis to collect the desired information about an application.

For example; Oracle audits have traditionally been completed by running scripts and queries – iQSonar enables this process on a grander scale in an automated fashion.

Strengths

It is great to see iQuate focusing on a high value niche and doing it well rather than trying to be all things to all men. They have gone after valuable configuration data for the largest software companies in the world; organizations harnessing this information will make significant bottom line savings.

I like the way that iQSonar users can build upon the platform and ‘slot in’ their own product adaptors. Finally, a key strength is time to value; organizations can make use of this agentless technology in their datacenter and start returning cost cutting configuration details in a matter of weeks.

Weaknesses

This technology is great if you know what you are looking for e.g. ‘I want to collect accurate data to populate my Oracle Server Worksheet so I can return an audit’. However I believe the tool set would benefit from a layer of business intelligence to help organizations understand and make use of their data. Users can organize and filter discovered assets, but some of iQuate’s competitors do a better job of providing different perspectives on discovered data and creating actionable information.

iQuate might argue that this is the role of the downstream tools that they integrate with, but I believe they are sat on a great data set and could provide even more value with the information they collect.

Product	iQSonar
Version	V2.11 (June 2011)
Methodology	Agentless Discovery, Central Repository and Web User Interface
In a nutshell	Collects complex server configuration details to support licensing decisions in the datacenter.
Customers	<ul style="list-style-type: none"> • ~ 20
Strengths	<ul style="list-style-type: none"> • Configurable Product Adaptors • Datacenter Focus • Time to Value – Quick Agentless Visibility
Weaknesses	<ul style="list-style-type: none"> • Lack of Business Intelligence – great if you know what you are looking for but more could be done with the collected data out of the box.
References	<ul style="list-style-type: none"> • Barclays Bank • Babcock Marine
Primary Market Focus	<ul style="list-style-type: none"> • Size: Large Enterprises • Use: Collecting Complex Server data for Datacenter Licensing • Environment: Datacenter
Pricing Model	Licensing dependent on what is being scanned – number of Oracle Cores, number of servers, number of operating system instances (physical or virtual). Available as perpetual licenses, term licenses or one off project based scan license.

From the brochure:

“iQSonar is a powerful discovery platform built to handle highly complex environments. Deployed agentlessly across the largest and most challenging network topologies iQSonar’s automated inventory eliminates manual errors that are common in discovery of complex multi-location, virtual, physical and cloud based environments. iQSonar supports multiple platforms, network infrastructures and enterprise applications.

iQSonar focuses on complex enterprise server technologies from Oracle, Microsoft, IBM and VMware (among many other vendors). iQSonar delivers unrivaled visibility of physical, virtual and cloud-based hardware and software assets thanks to its extensive technical breadth and depth.

Designed for use in the largest networks in the world, multithreaded architecture and innovative database design enables scalability supporting 200,000+ devices. iQSonar’s agentless technology is exceptionally quick to deploy. With expert support from iQuate’s team of network specialists, clients and partners are guaranteed rapid implementation and return on investment.

Through extensible Product Adapters, iQSonar is configurable to meet site and user-specific requirements and easily calibrated to run in almost any environment.

Deployed entirely within the client network, iQSonar retains all data centrally and securely. iQSonar increases security by using intelligent credential management, seamlessly integrating with user access control products, proxies and administration gateways. iQSonar is highly encrypted with AES Standard algorithms using multiple, variable length keys.

Unrivalled flexibility is key to iQSonar’s power. As an enhancement technology, iQSonar works with your existing processes and tools to improve visibility and inventory accuracy, unlocking and sharing the value of information held within the network, maximizing the ROI from your existing tools and processes.”

Links:

- [iQSonar Product Data Sheet](#)
- [‘Unlock the Full Potential of SAM’ Data Sheet](#)
- [On Demand Webinar and Demonstration \(Registration Required\)](#)
- [Contact iQuate](#)

Introduction



NEXThink have taken inventory to a whole new level with their 'Enterprise Desktop Monitoring' offering. As well as assets the company also monitors users, devices, packages, applications, executables, binaries, ports, destinations, connections and print jobs.

Their offering provides comprehensive and dynamic inventory information to support IT Asset Management efforts but also provides a contextual layer to the assets on the network to support service management priorities such as lags, delays, crashes, waiting times and bottlenecks.

It is a clever blend of network inventory and desktop monitoring which would be incredibly useful to service management or networking professionals looking to troubleshoot application performance.

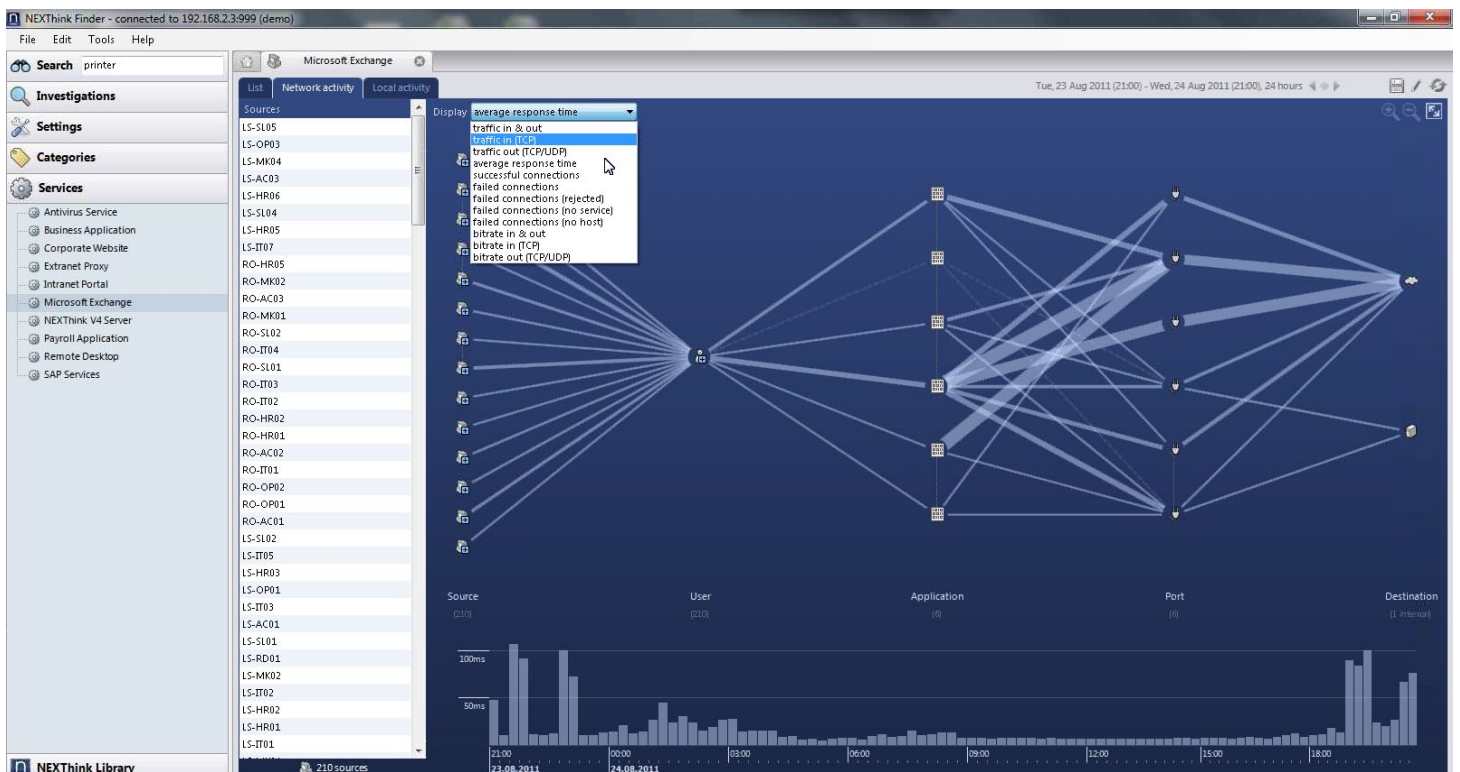
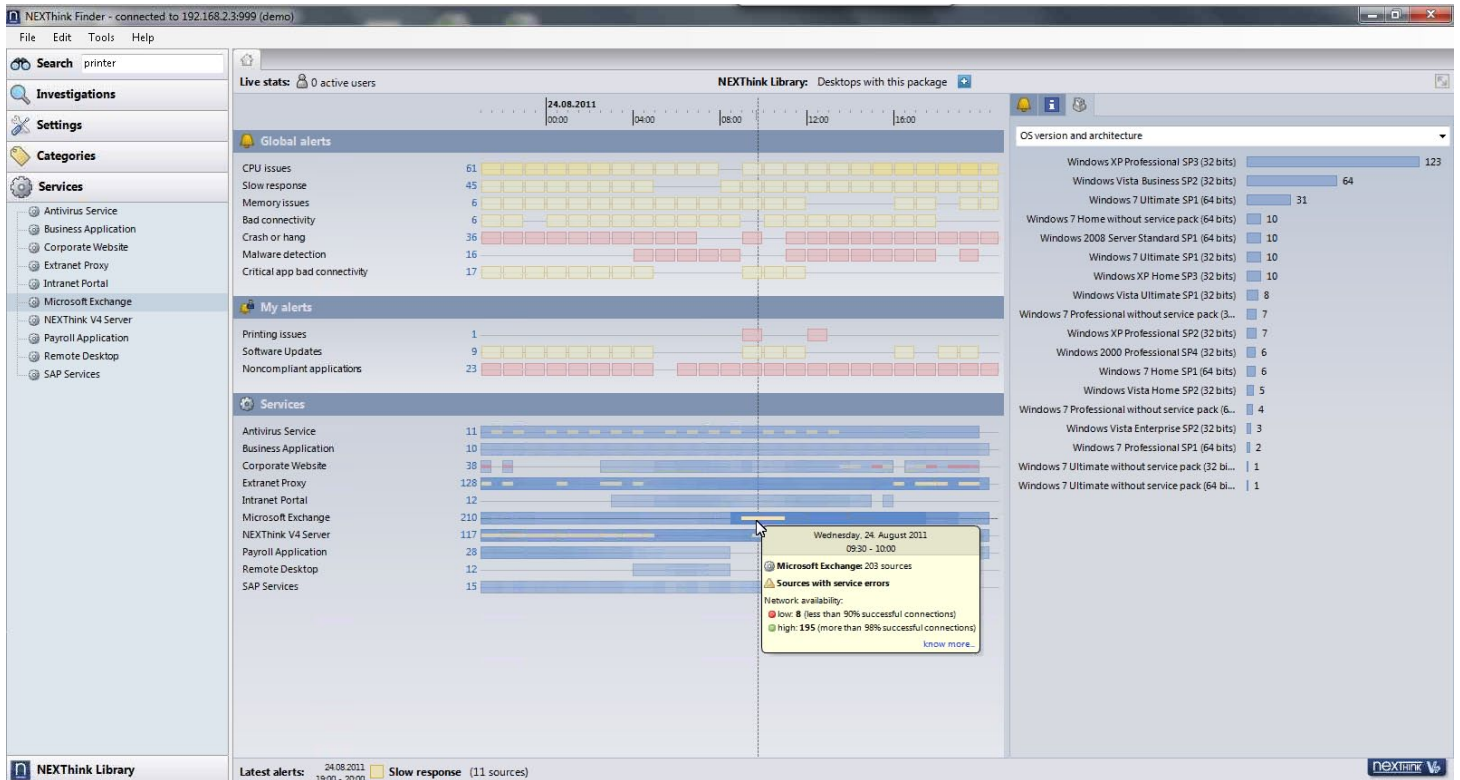
Infrastructure and Methodology

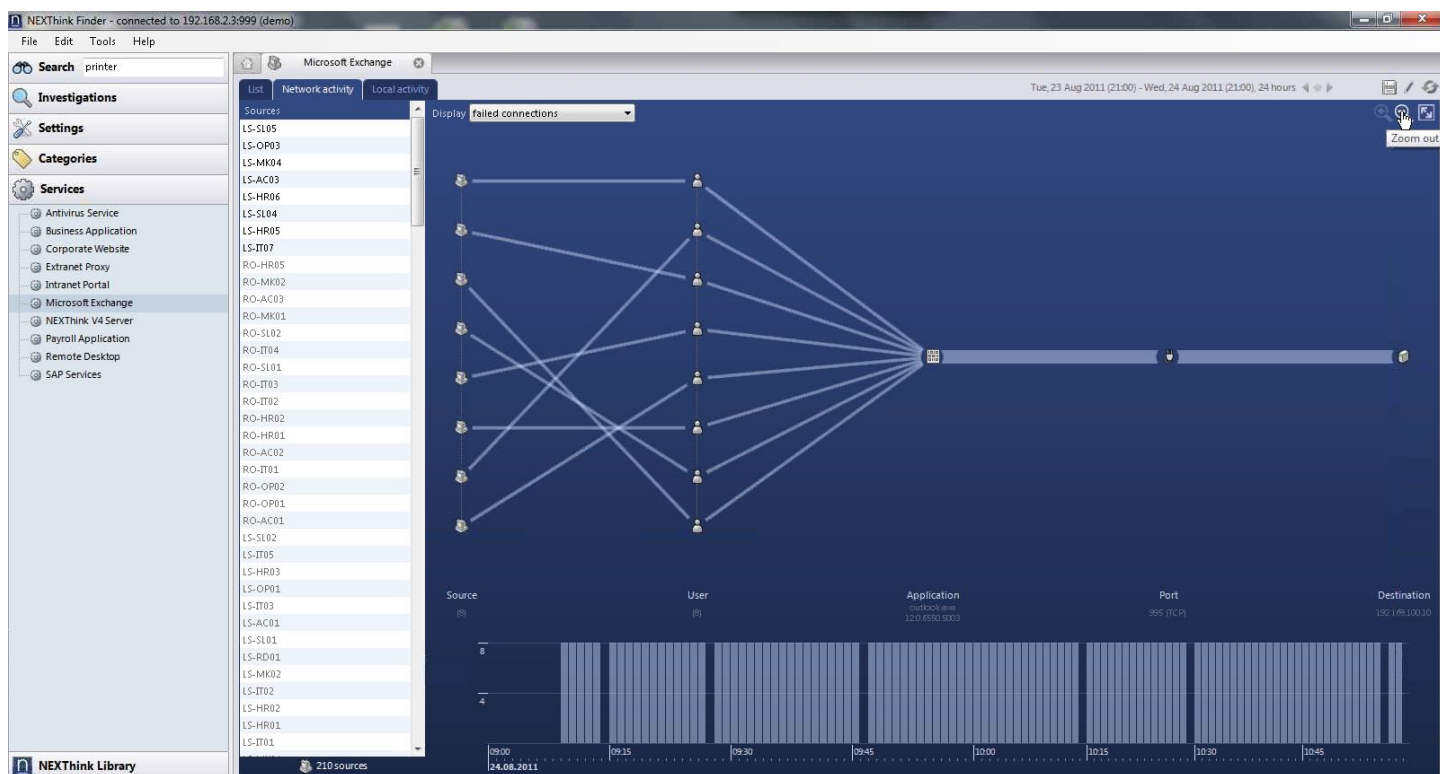
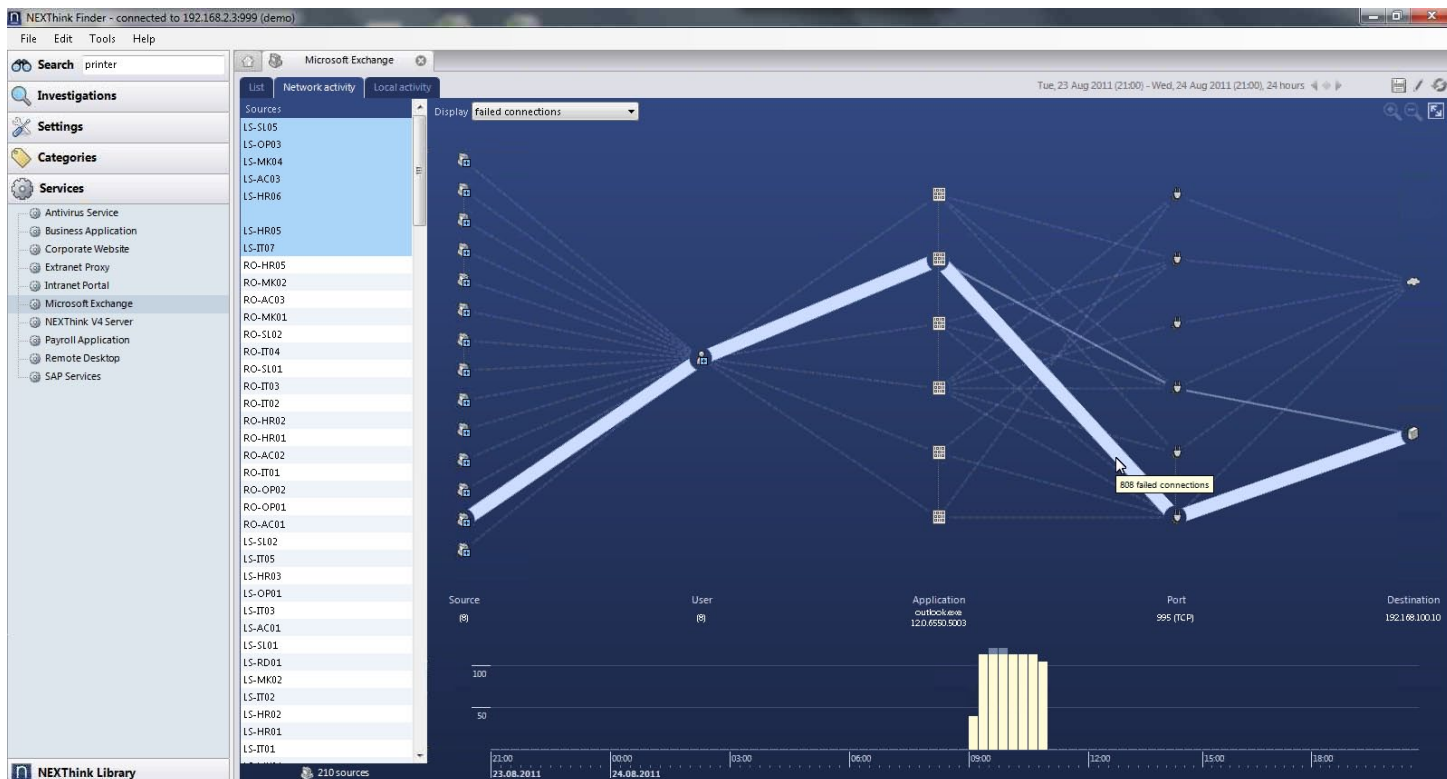
NEXThink utilize an installed agent, which sends real time information to a central engine. They promise a 'Google-like' search and query experience by saving data in an 'in-memory' database for instant access to results.

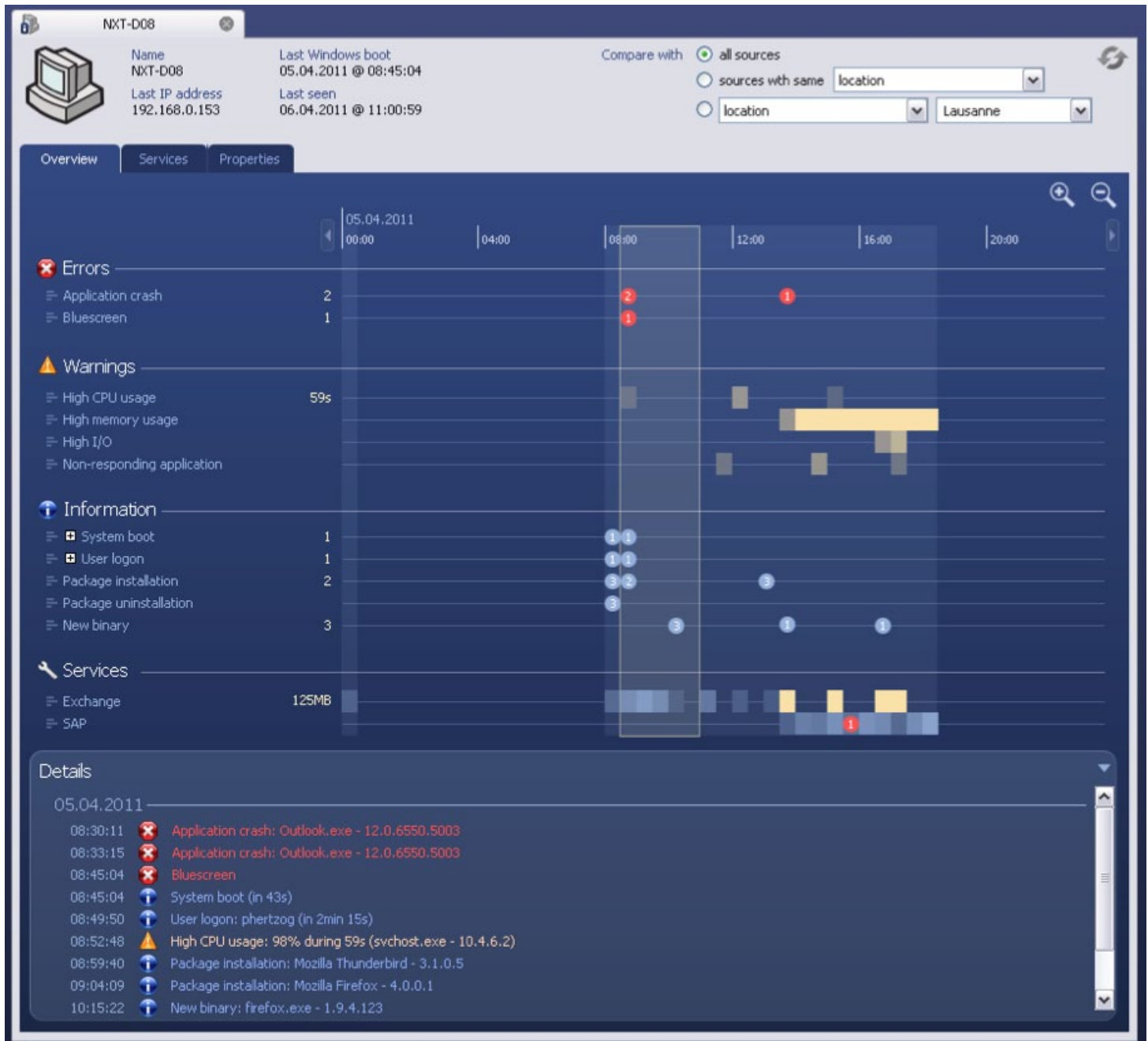
Day to day administration is via a standard console with additional web based reports. Users of the system can also make use of online knowledge base resources such as predefined investigations, reports and application information such as known security vulnerabilities.

Screenshots

Larger screenshots available online at: <http://www.itassetmanagement.net/inventory-discovery-tools-review>







NXT-D08

Name

NXT-D08

Last IP address

192.168.0.153

Last Windows boot

05.04.2011 @ 08:45:04

Last seen

06.04.2011 @ 11:00:59

Compare with

☒ all sources
 ☐ sources with same

location

☐ location

Lausanne

Overview

Services

Properties

Hardware

Manufacturer

Dell Inc

Model

OptiPlex 745

CPU

Intel Core 2 CPU 6400 @ 2.13GHz

RAM

3GB

Graphical cards

128MB ATI Radeon X1300 (128MB)

Computer serial number

8CCXK2J

Network

IP addresses

192.168.0.153

MAC addresses

00:18:8B:18:E1:9E, 02:00:4C:4F:4F:50

Workgroup

WORKGROUP

Distinguished Name

-

Startup

Last boot

04.04.2011 @ 12:28:38

Boot duration

21s

Last login

04.04.2011 @ 12:30:22 by phertzog

Login duration

1min 26s

Operating system

Version

Windows XP Professional SP3 (32 bits)

Last OS update

27.01.2011 @ 10:15:10

Local drives

System drive

C: 48.8GB (96% used)

Non-system drives

D: 100.2GB (55% used)

Hard disks

-

Security

Antivirus

Microsoft Security Essentials (2.0.657.0)

Last antivirus update

18.04.2011 @ 12:40:01 (1.101.1678.0)

Last antivirus scan

17.04.2011 @ 01:39:57

Categories

Non system drive free space

40% - 70%

System drive free space

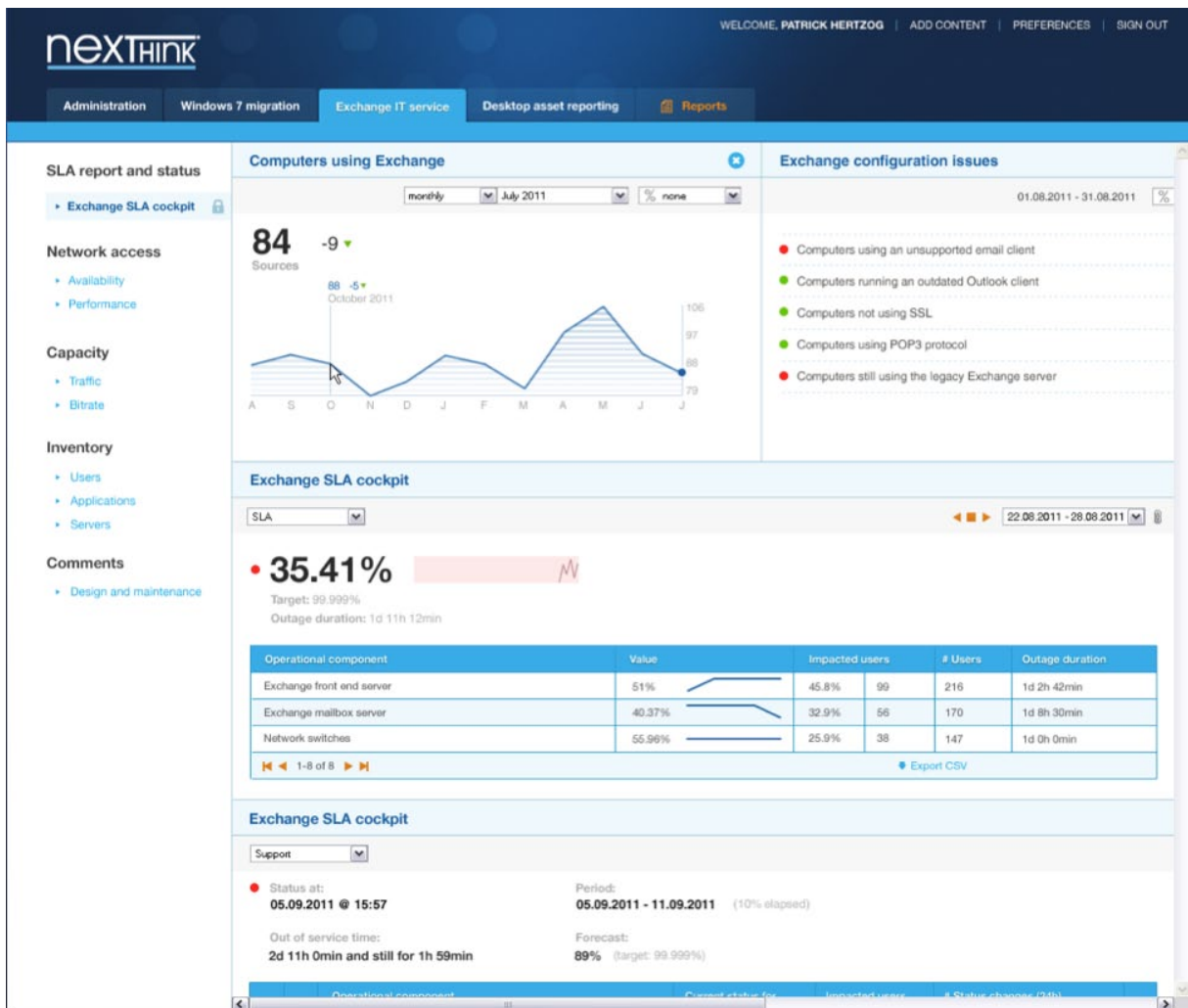
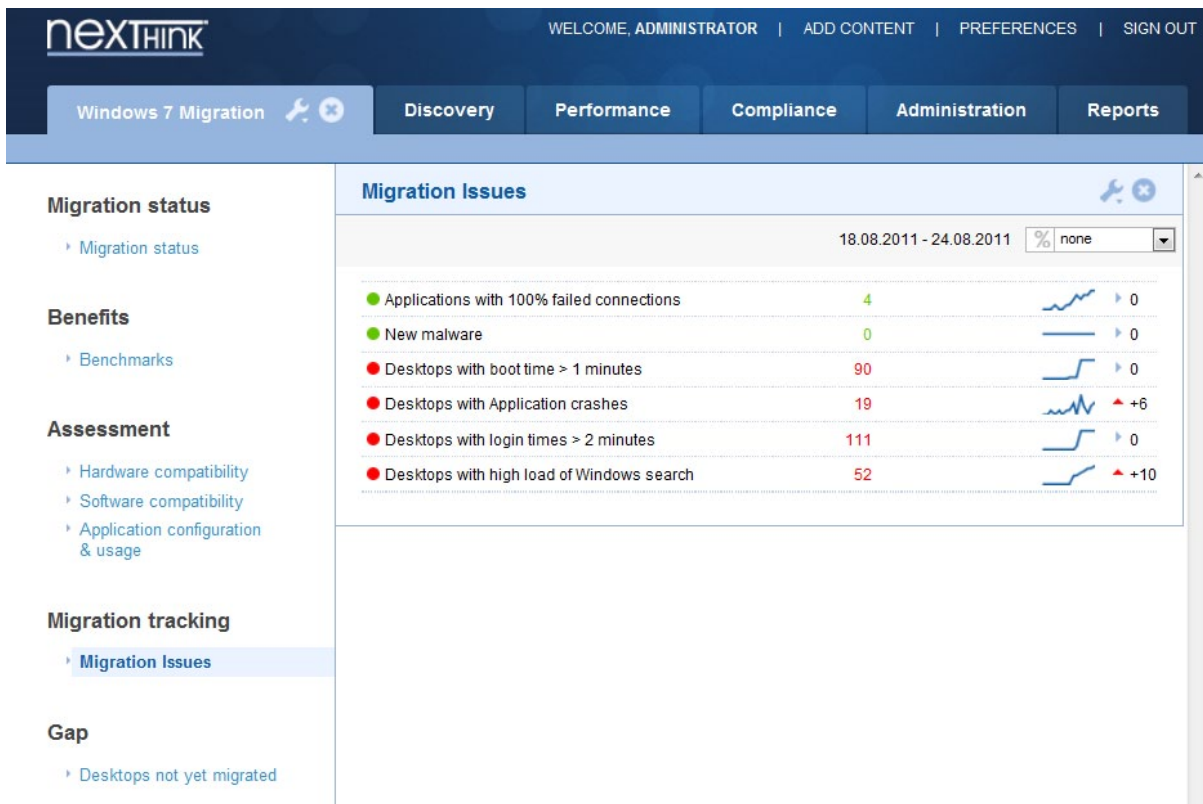
70% - 100%

OS compliance

-

location

lausanne



Service Quality Monitoring

NEXThink argue that outside the datacenter and the delivery of production or core infrastructure; the key measurement of performance is user satisfaction. Their offering is designed at identifying issues with service and analyzing the root causes within the infrastructure in order to improve customer experience and availability.

NEXThink begins with a bird's eye view of services with views of both current and historic performance. Administrators can configure global performance indicators (crashes, time-outs etc.) and business services (exchange, CRM, Intranet etc.).

From this global view issues can easily be identified and investigated via drill down into specific service details. Users of the system can view the relationship and performance issues between end user devices, users, applications, ports and destinations (the final delivery point for a service such as a physical server or cloud).

Asset Performance

As well as the high level service overview, users of NEXThink Enterprise Desktop Monitoring can drill down to view the details and analytics for specific devices. Search, browsing and reporting is intuitive and straightforward with seemingly endless drill-down and re-framing of data depending on circumstances.

I see the NEXThink offering as complimentary to traditional IT Asset Management toolsets. It offers a forensic level of detail on assets and configurations, but unlike other tools assessed in this review inventory data can be acted upon and reported on directly from within NEXThink rather than purely feeding another system.

Strengths

This is inventory on steroids, next generation asset performance, availability, forensics and relationship mapping. NEXThink includes great dashboards, reporting and service-oriented analysis. This is a great resource for hunting down root causes and improving user satisfaction.

Weaknesses

Price may put this technology out of reach for some organizations; indicative pricing is \$63 per seat for 1,000 Devices. NEXThink is currently only available for the Windows platform.

Product	NEXThink Enterprise Desktop Monitoring
Version	August 2011 (V4)
Methodology	Agent based inventory and activity monitoring
In a nutshell	Inventory on Steroids; discovery and relationship mapping aimed at user satisfaction and application availability for Windows devices.
Customers	<ul style="list-style-type: none"> • 170
Strengths	<ul style="list-style-type: none"> • Inventory on Steroids • Ease of use, great reporting and analysis • Oriented towards provision of services
Weaknesses	<ul style="list-style-type: none"> • Cost • Windows only
References	<ul style="list-style-type: none"> • French Ministry of Defense • Swiss Government • AXA • Qatar Telecom • Securitas
Primary Market Focus	<ul style="list-style-type: none"> • Size: Large Enterprises, Global 2000 • Use: General Desktop Inventory and Compliance, Performance Problem Detection, Application Performance and Availability • Environment: Desktops
Pricing Model	Priced by seat (Indicative; \$78 per seat for 100, \$63 for 1,000, \$34 for 10,000).

From the brochure:

“NEXThink is an innovative and fast-growing technology Swiss firm focused on helping IT organizations to address their end-user computing management challenges with a unique self-learning discovery and real-time monitoring technology of their hardware configuration and properties, application and network activities, computer and IT service health.

NEXThink real time desktop monitoring has been adopted in the last four years by more than 170 customers that have deployed the solution on more than 700'00 end-user workplaces across EMEA. By using NEXThink, these IT managers can fully control their desktop transformation projects, engage into virtualization, succeed in infrastructure and operational costs optimization, improve end-user satisfaction and infrastructure support, and validate end-point security and compliance:

- Performing live discovery of contextual inventory including utilization statistics and patterns, getting instant results
- Measuring IT service performance and computer health from each end-user device, preventing incidents and solving user issues much faster
- Ensuring compliance with corporate policy and mitigating risks by detecting unsecure activities
- Monitoring your virtual applications and desktops infrastructure to fine-tune host and network resources. Comparing virtual versus physical infrastructure performance, detect and resolve performance issues.
- Migrate your end-users and infrastructure with confidence, succeed in IT transformation at every step of your project

NEXThink is changing the IT management software experience in the way people can visualize and manage their IT infrastructure with products that are ultra-easy to install, very low in resources and performance impact, ultra-fast navigation and drill-down into live and historical data, and powerful diagnostics, alerting and reporting tools.”

Links:

- [NEXThink Brochures](#)
- [Documentation](#)
- [Contact NEXThink](#)
- [2-Minute Video Tour](#)

Numara Software

Introduction



Numara have a solid offering for inventory and discovery.

This is the strongest inventory tool for Mid-Market customers in this review. It ticks all the right boxes in terms of functionality with visibility of assets, reporting and analytics, ease of use, and most importantly the ability to take action.

Many of the technologies assessed in this review are data generators for analysis or feeding other systems. However the Numara FootPrints Inventory Manager and Compliance Manager offering is designed with action in mind; allow me to define a policy, allow me to benchmark my estate against that policy, show me desired versus actual assets, and allow me to take corrective action, all from within one console and one agent.

It does everything you would want a modern inventory tool to do, at an aggressive price. Numara's traditional core market has been small to medium companies but I suspect they will continue to irritate large enterprise competitors with this solution.

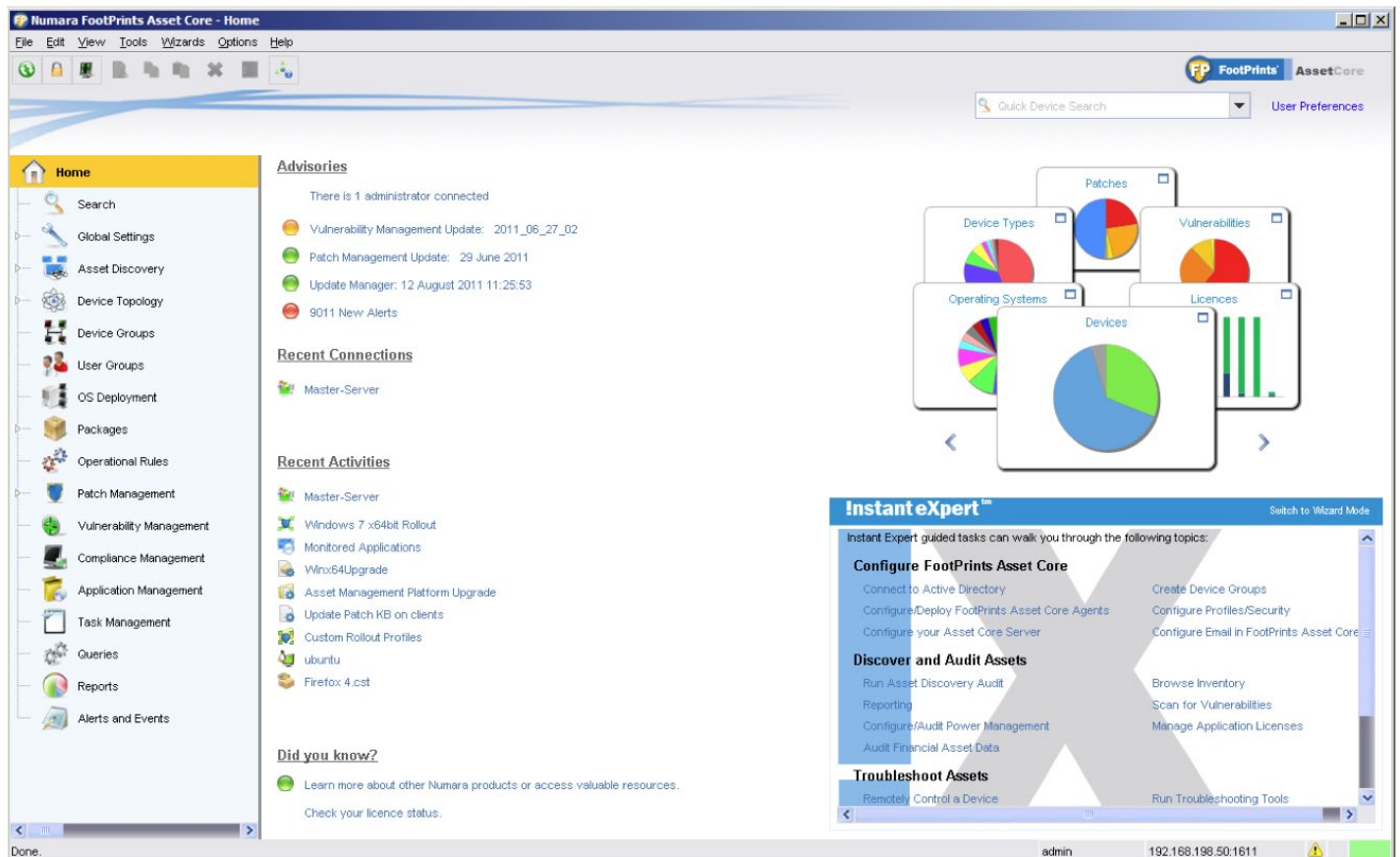
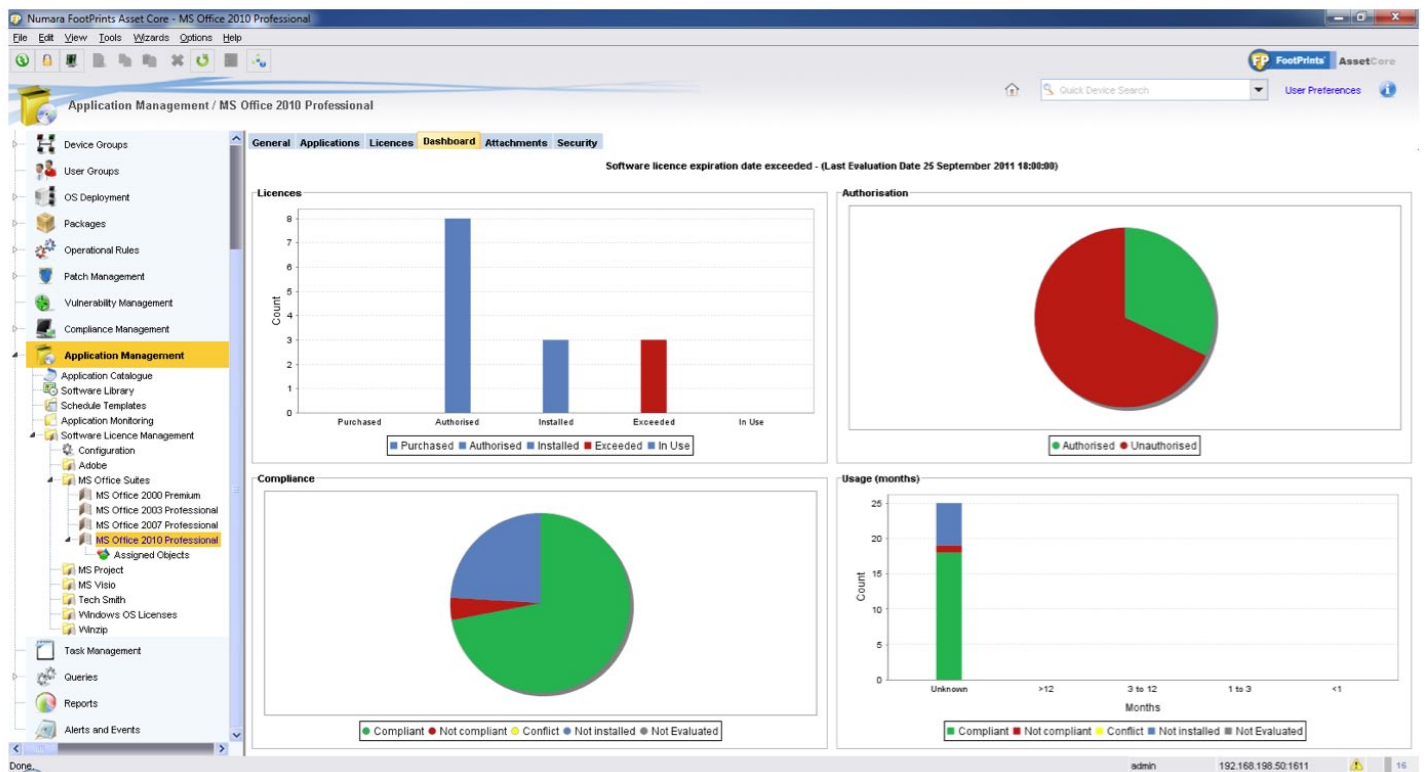
Infrastructure and Methodology

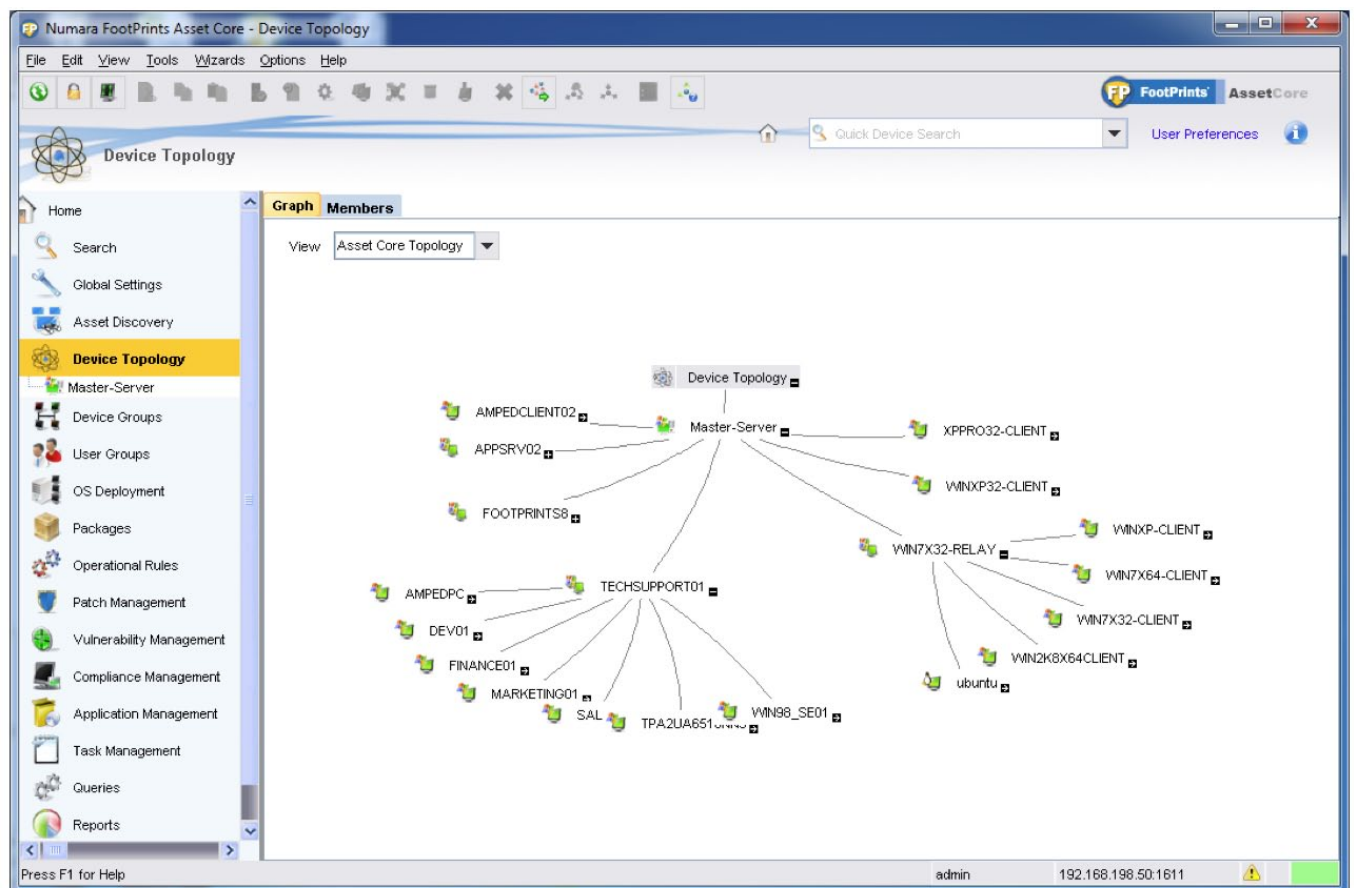
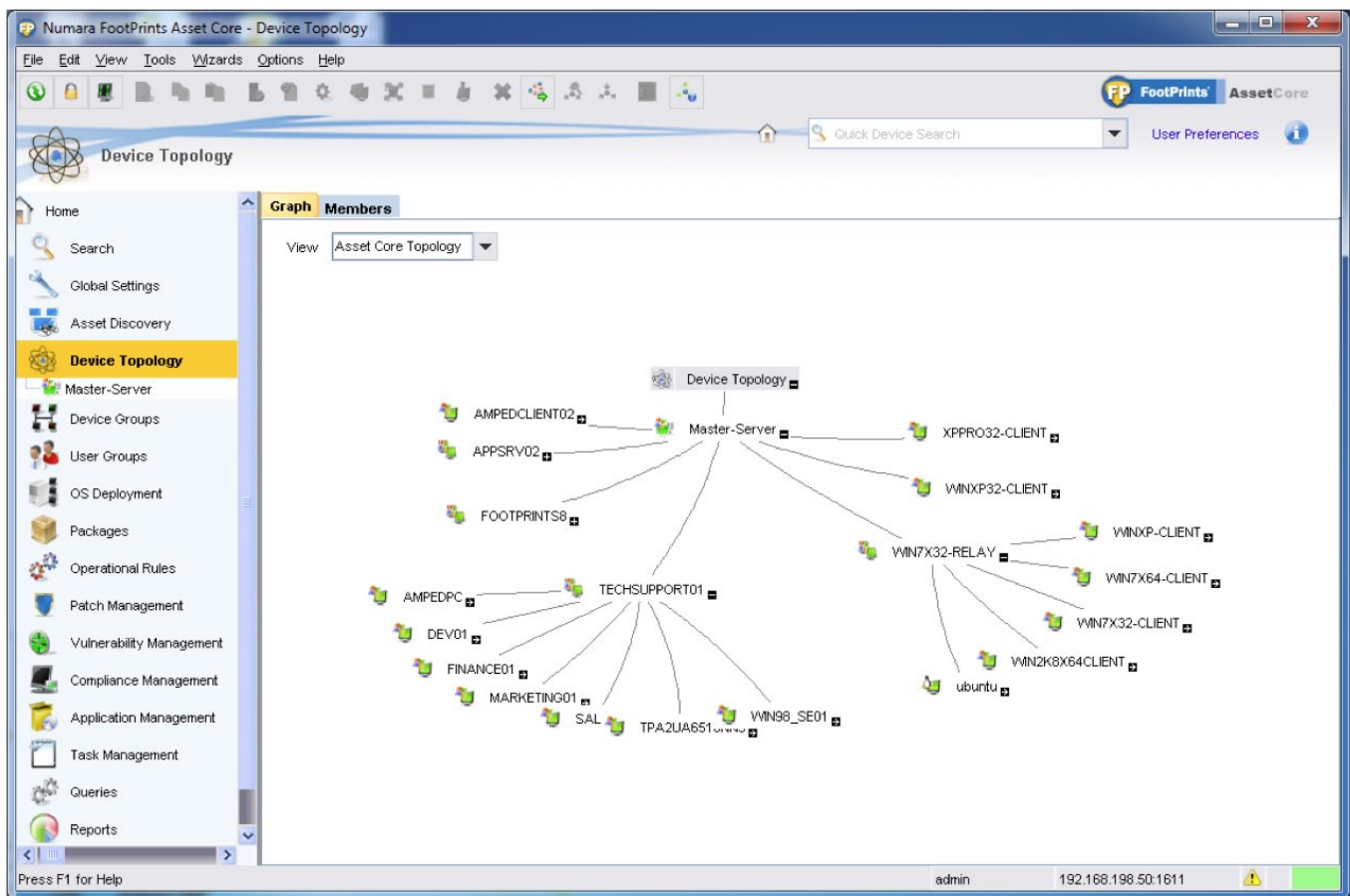
Numara use an agent / server infrastructure to deliver their inventory with other hybrid agent-less and auto-discovery options when required. Access to the main console is either via traditional on premise installation or java-based browser access, a cloud offering follows soon.

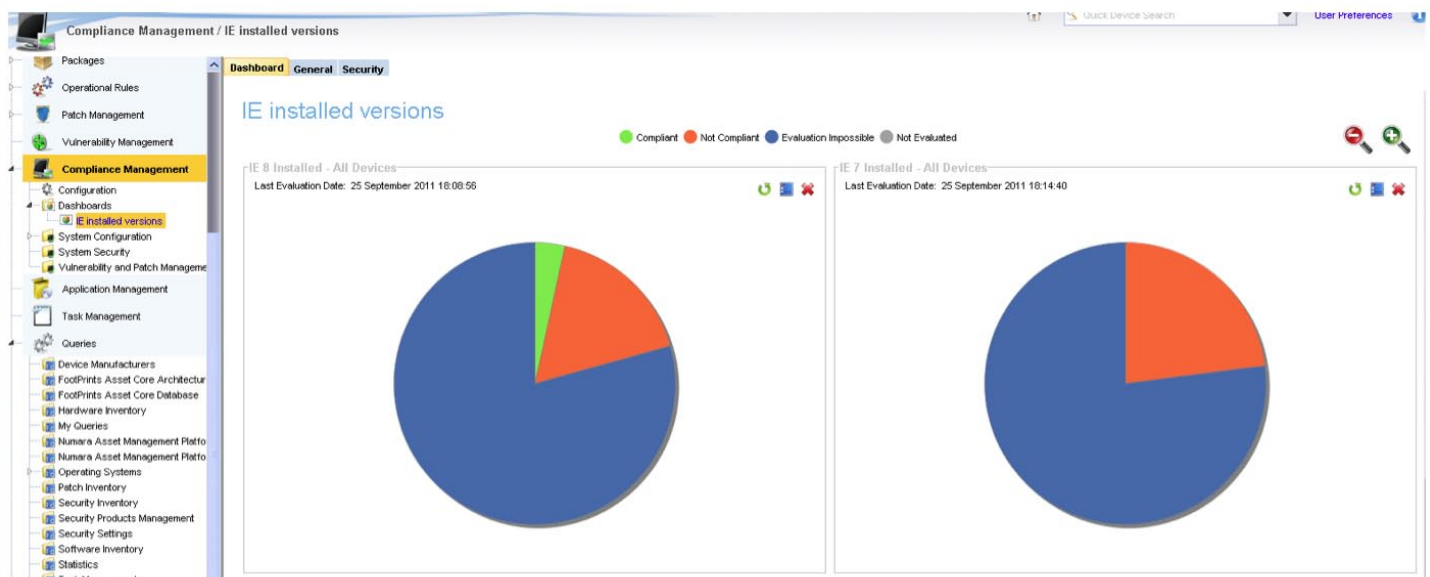
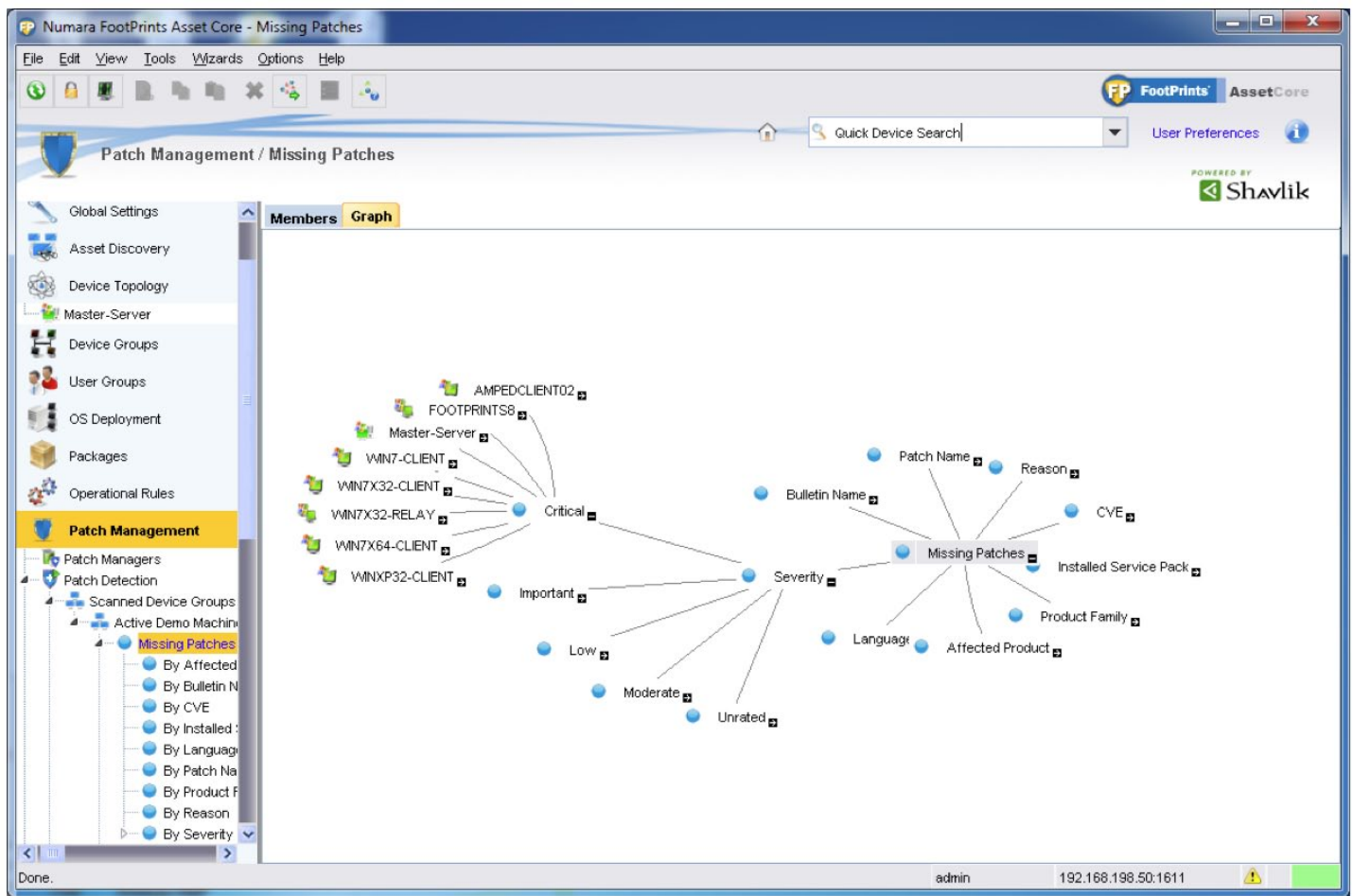
Every agent deployed can also be configured to operate as a local 'relay' to reduce workload. The relay works as a local Lieutenant and conduit to the main inventory server and coordinates all the other agents in that local vicinity. Individual agents can be configured to respond to the local Lieutenant, the central server or via the web depending on administrator preferences.

Once deployed this same single super agent can also be used for all other systems management tasks such as patch, deployment and vulnerability assessment. The result is a smart, scalable, dynamic picture of your estate.

Visual Mapping of Assets







The visual relationship mapping is impressive. Relationship mapping technology is usually dependent on one central data model with all subsequent reports stemming from this central theme – i.e. show me the services reliant on a configuration item or show me the ports hanging from a switch. With Numara the administrator defines the territory. Visual maps can be built from dynamic custom-built queries, for a handful of devices or hundreds. The screenshots provided with this review don't really do it justice, if you want an instant mind-map of issues at hand it's worth a look.

The IT Management Swiss Army Knife

What has struck me most about this offering is that it is designed for action and management by exception over analytics.

Administrators can define new builds or desired states and not only benchmark the estate against these goals but also monitor them until they are complete from an inventory and compliance perspective. For example I want standardize on a certain version of Internet Explorer; allow me to build a dynamic query showing all devices that deviate from that policy, assign that dynamic query to the deployment team to rectify and allow me to watch as the project is completed.

The industry norm is at best, incomplete integrations between different tools, and at worst printed job sheets or csv exports with lists of devices to be changed. The fact that project batons can be passed between different teams without losing accuracy and relevance, whilst catering for the different needs and priorities of teams, is very powerful. Other tools in this review offer this functionality – but not with one tool, one agent and the deployment and reporting infrastructure to give you confidence that the results are accurate and exhaustive. In this respect, Numara are definitely pulling away from the rest of the market.

One criticism of the Swiss-Army Knife approach to IT Management is that technology suites become jack-of-all-trades and master of none in comparison to best of breed niche tools. Numara have taken steps to address this with strategic partnerships with other enterprise software leaders such as Shavlik for vulnerability information and Express Metrix for software recognition.

Product	Numara FootPrints Inventory Manager and Compliance Manager
Version	V11 (November 2011)
Methodology	Agent or Agentless Inventory and network governance
In a nutshell	IT Management Swiss Army Knife
Customers	<ul style="list-style-type: none"> • 900
Strengths	<ul style="list-style-type: none"> • Versatile • Easy to Use • Great Value for Money • Report actual versus desired and take action • Dynamic Groups and Visualization
Weaknesses	<ul style="list-style-type: none"> • No Unix.
References	<ul style="list-style-type: none"> • Air France, • Tottenham Hotspur, • City of Atlanta, • Trafigura
Primary Market Focus	<ul style="list-style-type: none"> • Size: Mid-Market Organizations • Use: All-round Inventory, Policy Governance, IT Management • Environment: Desktop & Datacenter
Pricing Model	Volume pricing per seat (Indicative pricing for 1,000 seats Inventory Manager \$13.50 per seat, Compliance Manager \$9.00 per seat).

From the brochure:

“Numara FootPrints Inventory Manager and Numara FootPrints Compliance Manager are part of a modular yet fully integrated solution for IT Lifecycle and IT Service Management.

FootPrints Inventory Manager automates complex inventory tracking providing accurate, current and complete asset intelligence to help guide investment decisions reduce manual processes and maintain compliance.

From the desktop, FootPrints Inventory Manager will automate the entire data-gathering process for your fixed and mobile IT assets whether they’re Windows, MacOS, Linux/VMware Workstations, servers, laptops or mobile/peripheral devices. After the initial audit, you will have a complete view of your IT assets, including their current hardware and software configurations.

From the console you’ll be able to manage configuration changes across the network or enforce change-control policies. It will also maintain a detailed inventory history and update this through scheduled automated audits or its ‘audit now’ feature when you need your asset data in near real-time.

FootPrints Compliance Manager allows you to define policies based on vendors’ licensing agreements and other regulatory standards to quickly assess your compliance levels. With essential tools, reports and templates for ISO 27001, ISO 27002, National Institute of Standards and Technology (NIST) and Microsoft® hardening guides, you’ll be ready for your next audit with the minimum amount of disruption.

FootPrints Compliance Manager integrates tightly with FootPrints Inventory Manager to give non-intrusive, agent-less scans of your network that will detect any potential compliance issues. The dynamic grouping options allow you to quickly identify, group and take action against any devices that do not meet your defined compliance policies. Numara FootPrints has achieved PinkVerify 3.1 Ten Process Accreditation.”

Links:

- [Numara Software Footprints](#)

Introduction

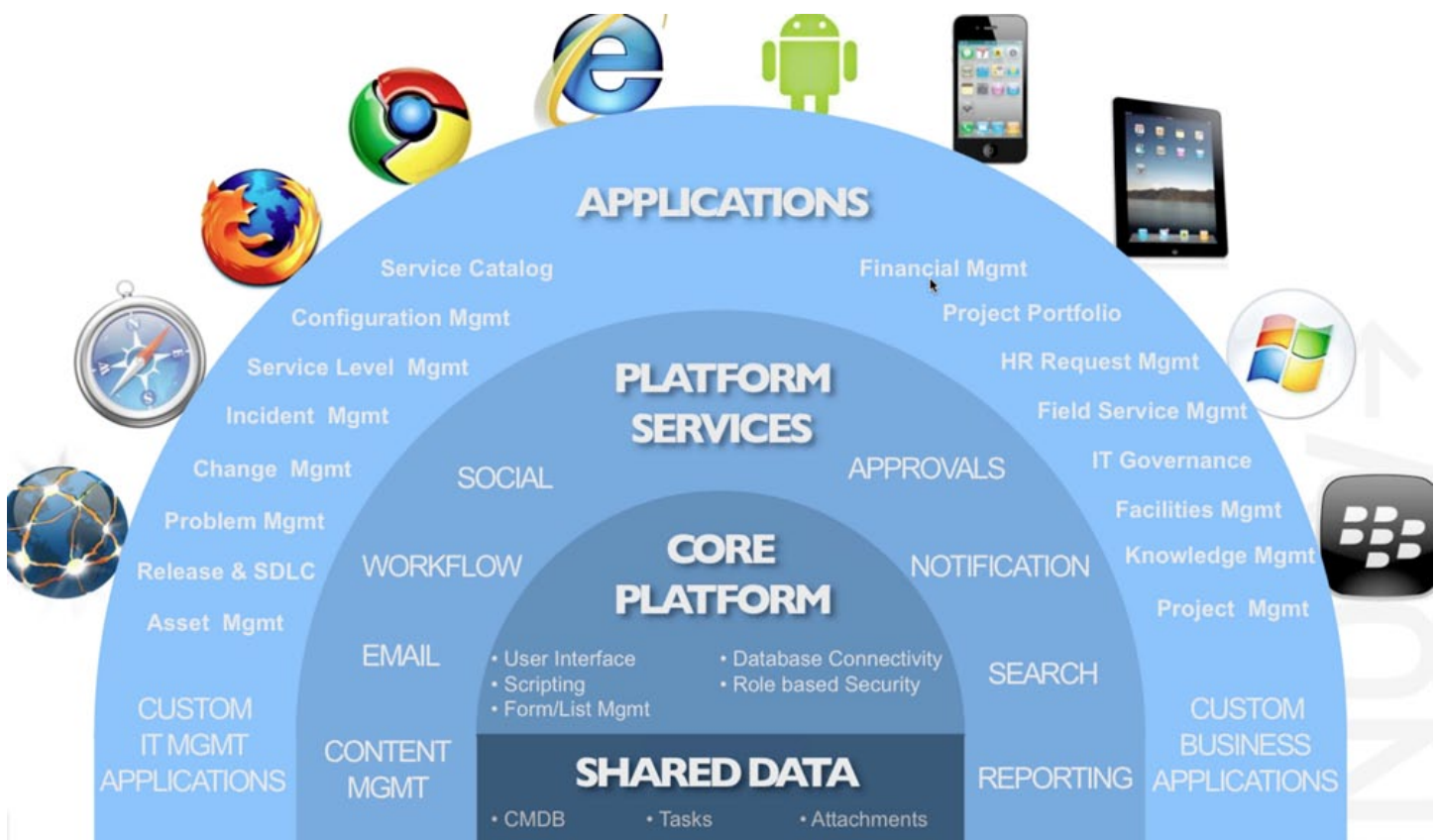


ServiceNow is a SaaS IT Service Management platform. Their network discovery and inventory offering, 'ServiceNow Discovery', is specifically designed to populate the ServiceNow CMDB and populate downstream ITIL processes with network and asset data.

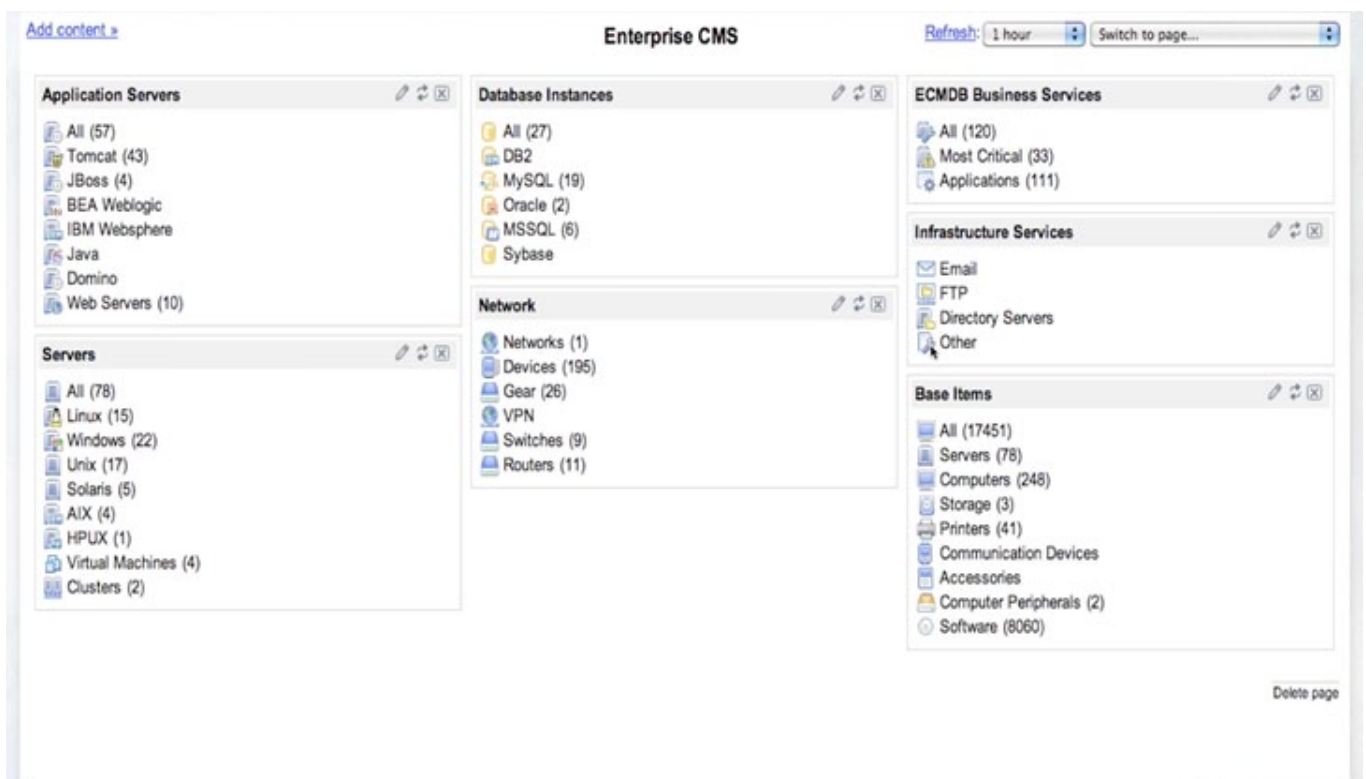
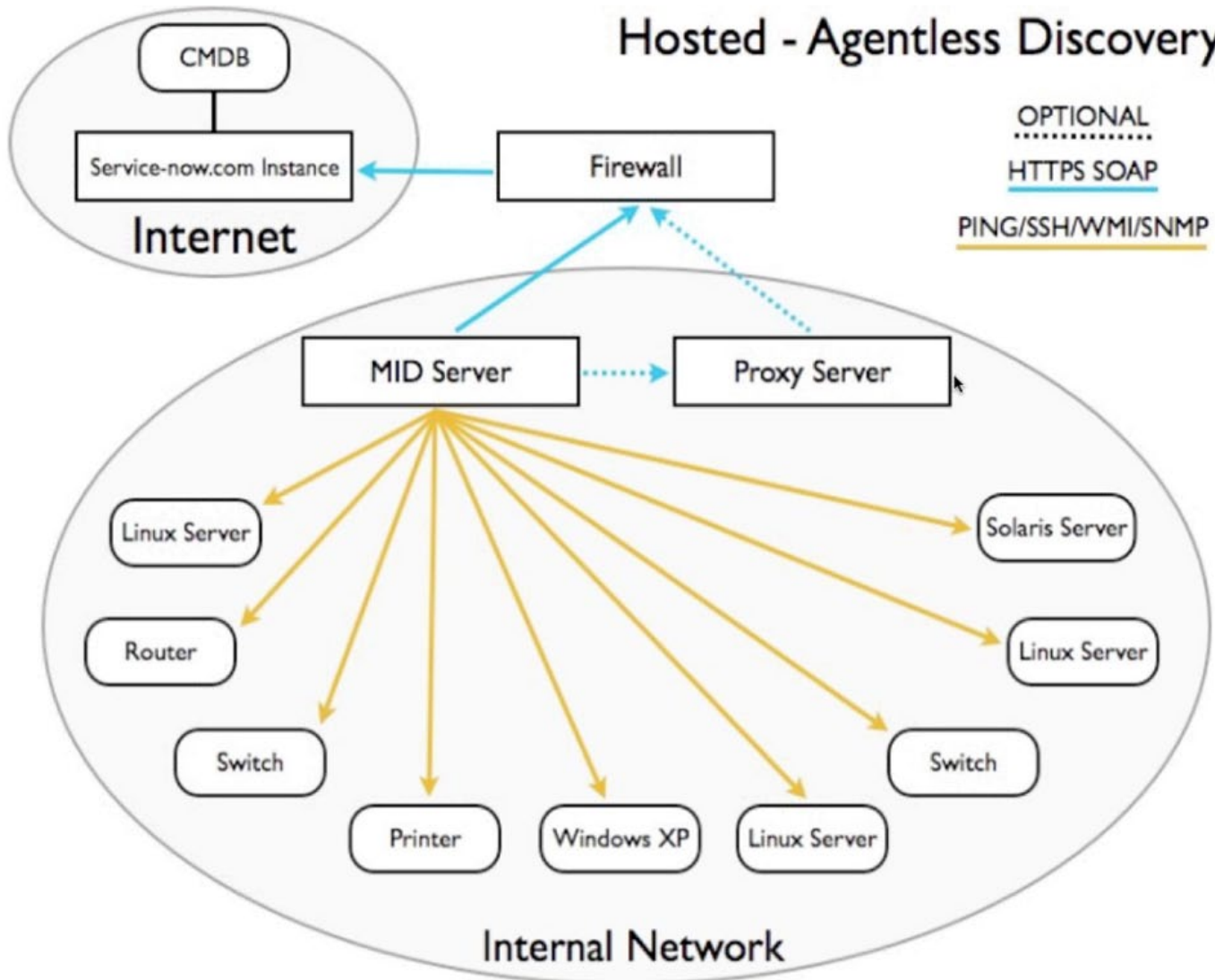
ServiceNow Discovery also maps relationships between discovered items and augments inventory data with other enterprise data feeds. The goal is to seed service management processes with accurate inventory data; build a single source of truth and system of record.

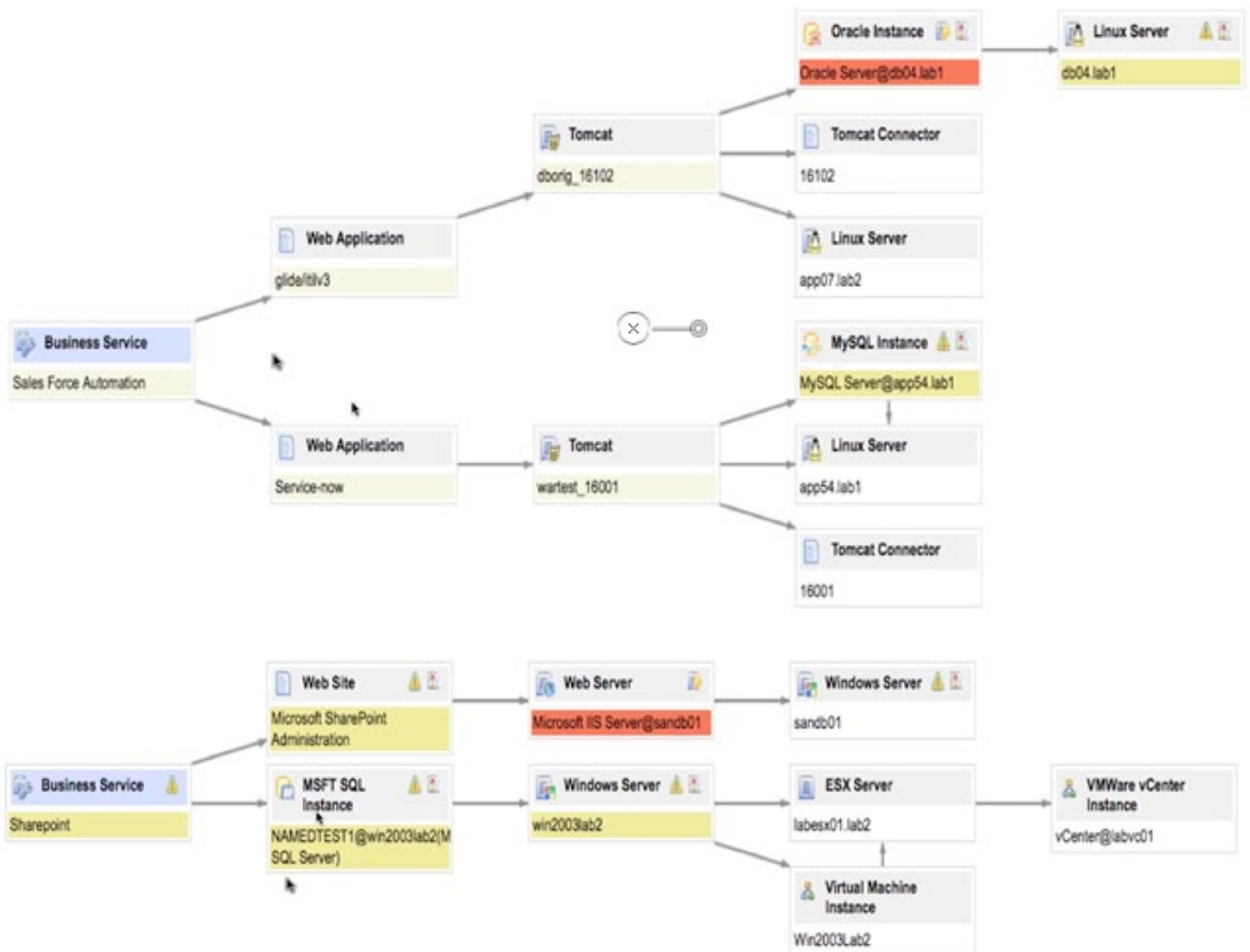
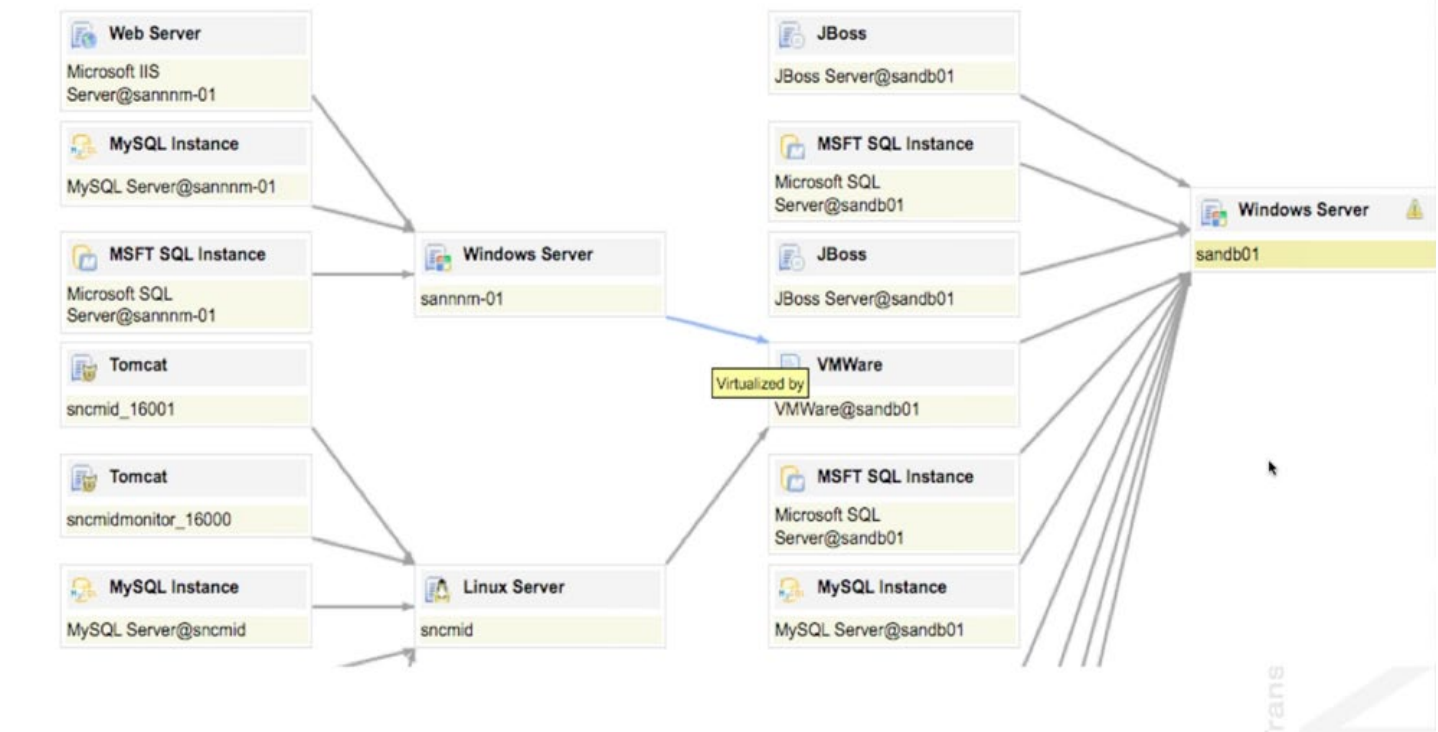
Screenshots

Larger screenshots available online at: <http://www.itassetmanagement.net/inventory-discovery-tools-review>



Hosted - Agentless Discovery





Business Service

Name: Approval group:

Owned by: Support group:

Business criticality: Managed by:

Version: SLA:

Used for: Location:

Operational status:

Comments:

Related Items: Levels

Depends on - Oracle Instances

-

Depends on - Web Applications

-
-

Depends on - MySQL Instances

-

Runs on - Linux Servers

-
-
-

Runs on - Tomcats

-
-

Contains - Tomcat Connectors

-
-

Related Links



IT Service Management Suite

Switch to the old UI

Welcome: System Administrator

Type filter text

Self-Service

- Homepage
- Service Catalog
- Knowledge
- Help the Help Desk
- Incidents
- Watched Incidents
- My Requests
- Requested Items
- Watched Requested Items
- My Profile
- Take Survey

Service Desk

- Incident
- Problem
- Change
- Release v2
- SDLC (scrum)
- Project
- Time Cards
- Configuration

ITIL Overview

KPI - Number of Incidents by Category

Created Totals	Count Totals	Percent
Apr/2009 Total	1	1.59%
Sep/2009 Total	4	6.35%
Oct/2009 Total	5	7.94%
Mar/2011 Total	32	50.79%

SLAs by Stage (by SLA)

KPI - Number of Problems by State and CI

Infrastructure & Methodology

The ServiceNow Discovery infrastructure consists of two components:

1. Management, Integration and Discovery (MID) Servers that sit locally on the network
2. An instance in the cloud

The MID Servers, as the name suggests, act as local sentinels collecting information, talking with data sources and discovering the network. This data is then encrypted, bundled and fed to the instance in the cloud where the data is interpreted.

The MID Server is a ~30MB standalone Java application, typically residing on a Windows Server and placed strategically across the network depending on network structure and geographical locations.

The MID Server sits behind the firewall and communicates using a specific configurable port. One of the key selling points of a SaaS application is removing upgrade headaches; the MID Servers update themselves whilst the main instance is upgraded.

The MID Server uses agentless discovery across native ports and protocols. As with any agentless offering there is a trade-off between the use of installed agents and richness of data. For the sole purpose of feeding the CMDB, I think they have struck the right balance. Competitors may have more depth in terms of discovered data but also have different goals in mind such as systems management and deployment.

Enterprise Configuration Management System

All this data collected from the MID Servers is fed into an online Enterprise Configuration Management System (CMS).

With Service Management in mind, network discovery data is unlikely to be your only source of information. ServiceNow Discovery data can be 'federated' with other sources, such as databases, to add metadata to discovered assets.

For example last logged in user can be correlated with active directory data, which can be correlated with purchase history databases and so on.

I found these enterprise data Mashups to be blindingly straight forward and intuitive. Integrations follow a simple three-step process:

1. Identify your data source (e.g. SQL)
2. Assign a 'Transform Map' (what data goes where)
3. Assign a schedule (how often)

Support for a variety of enterprise integrations is made available via the ServiceNow wiki.

From Discovery to Business Service Management

Discovered network configuration items and relationships are automatically mapped.

Users of the system can manually specify which technical items constitute a business service. For example the business service 'Sales force Automation' might be made up of two web service components. Once this linkage is made by the user ServiceNow Discovery associates all the component parts and relationships that underpin that business service.

The result is a bird's eye view of the business service. Each component of the service is annotated with any current incidents, problems or changes that are pertinent to that service. Users can subscribe to a business service and receive a feed or updates on all the dependencies associated with that service

The arrangement of information and fields can be configured to suit user roles; so a technical analyst might see a different view of the world to an asset analyst, and each user can configure their own world view in terms of dashboards and portal settings.

Strengths

It's what you would build if you wanted to build a CMDB from scratch in the cloud. Key strengths are the versatility of the whole system; it's ease of use and intuitiveness. I particularly liked the bird's eye view of business services and associated assets and found the enterprise data Mashups to be very powerful.

Weaknesses

This is a review of inventory tools not Software Asset Management tools, but the software recognition capabilities of ServiceNow Discovery was lacking compared to agentless competitors in this group test.

Although the primary goal is ITSM, as organizations mature and look to broaden the scope of ServiceNow to include basic License Management they will find this section of the solution to be labour intensive compared to competitors (For example for automating new software requests or building in license management steps into change management).

Specifically, ServiceNow uses add/remove programs for software identification, which is unreliable for license management. Users need the ability to translate installed files and technical data into recognizable product licensing terms.

This is perhaps an overly critical point of an otherwise compelling solution.

Product	ServiceNow Discovery
Version	June11
Methodology	Agentless Discovery feeding a SaaS ITSM Platform
In a nutshell	Enterprise-grade agentless discovery and relationship mapping for datacenters
Customers	<ul style="list-style-type: none"> • 150 Using Discovery • 800 Total
Strengths	<ul style="list-style-type: none"> • Versatile • Ease of Use • Bird's Eye View of Business Services Enterprise Data Mashups
Weaknesses	<ul style="list-style-type: none"> • Application Recognition (Add/Remove Programs Only)
References	<ul style="list-style-type: none"> • Intel • Kohler • Kimberly-Clark
Primary Market Focus	<ul style="list-style-type: none"> • Size: Large Enterprises, Global 2000 • Use: Populating the CMDB for IT Service Management • Environment: Datacenter
Pricing Model	Priced by physical server, minimum 500 servers (Virtual machines, desktops and other networks devices free). Prices start at US\$5.50 per server per month with volume and term discounts available.

From the brochure:

“We know the configuration management database (CMDB) is only as useful as the accuracy of the data and relationships it manages. ServiceNow Discovery, with application dependency mapping, is agentless and is designed specifically to populate and maintain an accurate ServiceNow CMDB.

Built on the ServiceNow platform, Discovery takes the hassle (and the network impact) out of running this critical process. ServiceNow Discovery detects networked configuration items (CIs) and application dependency mapping determines relationships to help automate service model definition. This information is then used throughout all ServiceNow applications to automate closed-loop change verification, perform unauthorized change detection and impact analysis, and enable hardware and software asset management.

IT organizations need a lightweight discovery technology built on the same platform as the ITSM functionality it supports. Discovery is fully integrated with all ServiceNow applications to give you a good understanding of technology infrastructure and help you deliver excellent IT service. Legacy discovery tools can only be run outside of business hours to avoid a negative impact on network traffic, which really impedes the usefulness of discovery. With ServiceNow, you can run Discovery whenever you need it, without impacting your network performance.”

Links:

- [ServiceNow Discovery Product Page](#)
- [Online Demo](#)
- [Contact ServiceNow](#)
- [Wiki](#)
- [On Demand Webinar](#)

