

What's new in NetCrunch

See the most important features, enhancements and fixes

See Release Notes (</netcrunch/page/release-notes>)

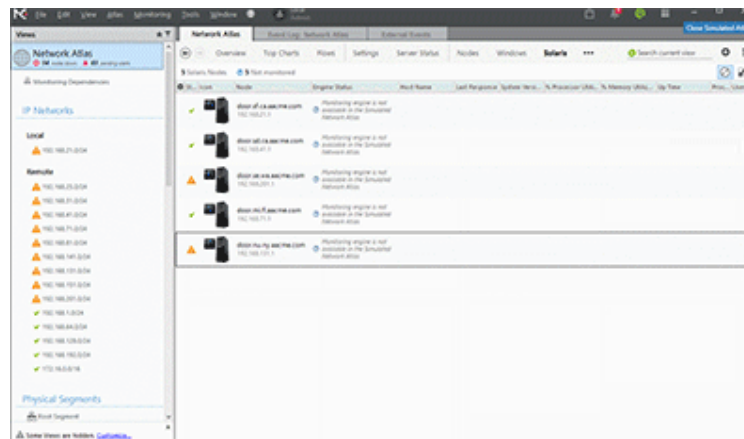
9.3

(October 2016)

UI Improvements

Intuitive Navigation with Smart Pages

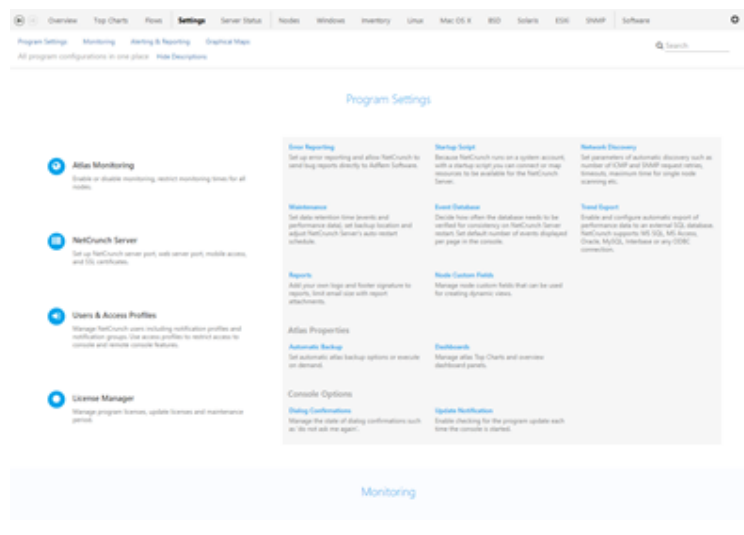
NetCrunch automatically shows pages according to the selected Atlas View's content. Instead of staying on the same page like previously, the program selects the best page to display the most relevant content. The user can override these settings and select which page will be visible as the default page for the chosen view. If you click holding **ctrl** button the page switch will be locked.



UI Improvements

All Settings in One Place

All settings are searchable and you can find them on a single Settings page at the Atlas top level view.



Improved graphical map editor

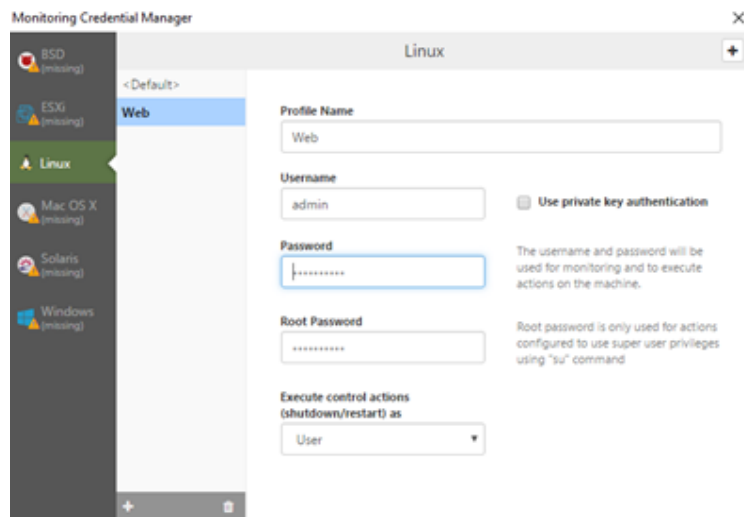
The editing experience has been greatly improved:

- New color picker allows live color changes
- Visual styles are now much easier to select
- Support for SVG graphics
- Automatic icon lineup



Multiple monitoring credential profiles

Now you can create multiple profiles for each system. Previously, only the default profile was available.



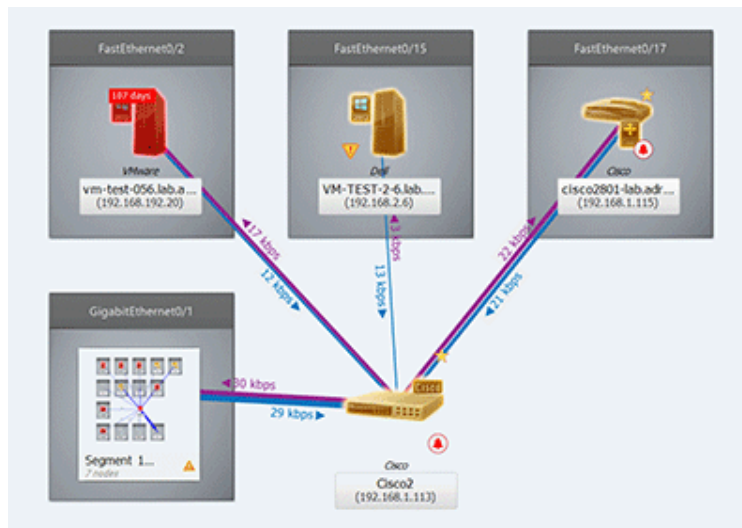
New Integrations

- **Campfire** - send message to campfire chat room,
- **Pushover** - send notification to multiple devices using pushover,
- **Ryver** - send notification via Ryver
- **Clicatell** - Send text message to the phone via Clicatell service
- **Asana** - Create, update or close task
- **Connectwise** - Create or close ticket
- **Flowdock** - Create or close ticket
- **Freshservice** - Create or close ticket
- **JIRA** - Create or comment on ticket
- **JITBIT** - Create or close ticket
- **LiveAgent** - Open or resolve ticket
- **Mojo Helpdesk** - Create or close ticket
- **Ops Genie** - Create or close alert

UI Improvements

Improved Layer 2 Maps

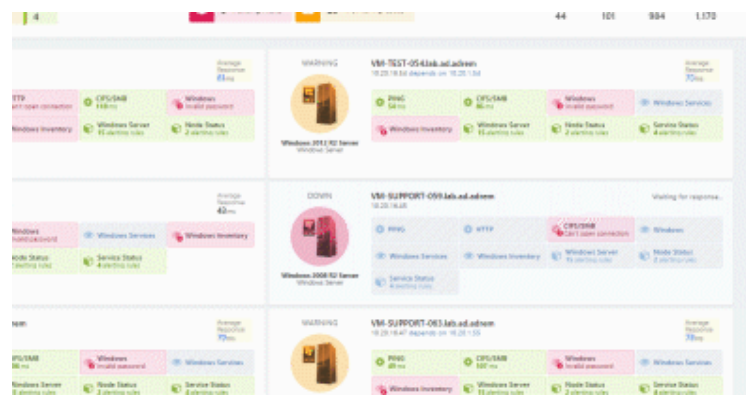
Physical segment maps now show live network traffic in both directions.



UI Improvements

Nodes Overview Dashboard

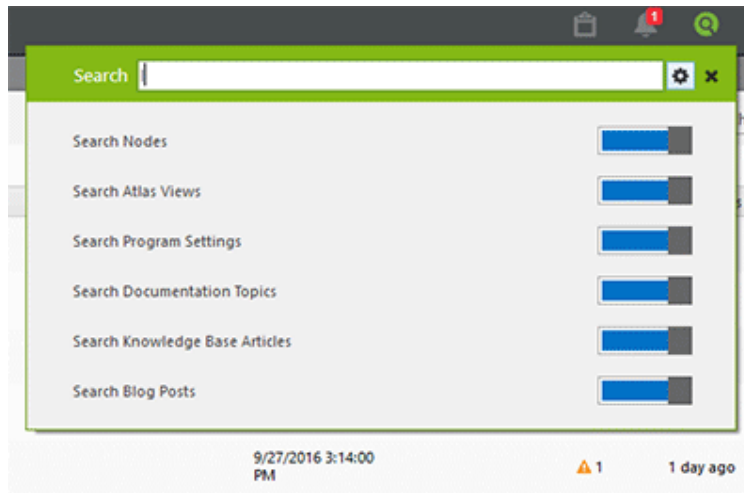
A new dashboard designed for monitoring smaller networks displays the details of each node's status for views containing up to 50 devices.



UI Improvements

Extended Search

The search feature now has new options and looks for: nodes, atlas views, program settings, documentation topics, knowledge base articles and blog posts.



Other improvements

Other important improvements

- **Top menu** has been redesigned in order to make it more intuitive
- **Atlas Rescan** - added the ability to re-scan the whole atlas when you add new SNMP profiles or services. Now NetCrunch can re-scan all nodes, networks and domains in a similar way to initial scanning.
- **Display Name** - each node now has a global Display Name. Previously, the Display Name could be set only for a given view
- **Backup finished event** - NetCrunch triggers a new event after backup is completed
- **Event Suppression** - Event Suppression management has been redesigned
- **Note** - The last written note is displayed in the Node Details table
- **Proxy support** - HTTP sensors support proxies now
- **Import old rights** - Import user access rights from version <= 9,1
- **Documentation** - documentation has been updated with new topics
- **Access Rights** - the access rights editor has been improved and is much easier to use. Added missing access rights to manage access to node events (Node.Events)
- **Console** - The Administration Console uses about **30% less memory** than the previous version
- **OpenSSL** - OpenSSL has been updated to version **1.0.2j**

UI Improvements

Auto Sizing & Full Screen Support

- Dashboards, Maps and grids have an auto scaling feature that adjusts to screen size and content
- In full screen mode, dashboards automatically scrolling up and down
- Grids and performance views support full screen now

Monitoring

Generic Agent Data Sensor (REST API)

It allows you to send data to NetCrunch nodes using REST API. It also supports sending status values so that a user can easily track and react to these statuses.

For example: by sending the status of door=open we can visualize it and react on its change or value.

Feeding NetCrunch with data has never been easier!



Monitoring

AD Domain Auto Re-Scanning

Now every Active Directory domain can be automatically re-scanned in order to discover new nodes that should be added.

9.2 (July 2016)

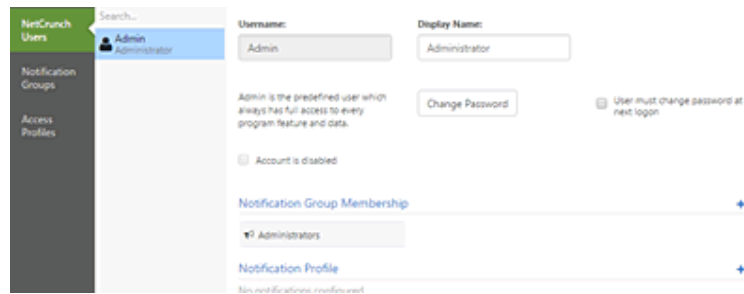
Monitoring

New Users & Access Rights Management

User accounts and access profiles have been redesigned. Now Console and WebAccess use the same accounts for authentication. New User & Access Rights Manager window is much easier to use than the previous one.

Additionally, various settings are now automatically synchronized within the user profile and between desktop console and web console.

New "NetCrunch Audit" Monitoring Pack enables tracking users access to NetCrunch Console and failed login attempts to the Console.

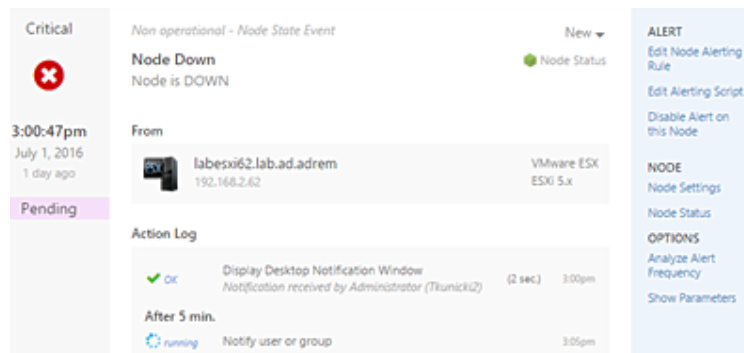


Monitoring

Redesigned Event Details

New window offers better insight into event parameters and implements many useful features which give you more flexibility to fine tune the alert settings.

- o allows changing various alert parameters, you can easily disable alert, change its parameters or alerting actions
- o shows the Monitoring Packs where the event is defined and allows to adjust it if necessary
- o allows analyzing alert frequency
- o comments can be added to alerts and the last comment will be visible in the event log
- o display performance chart calculated in the same way as the threshold is monitored



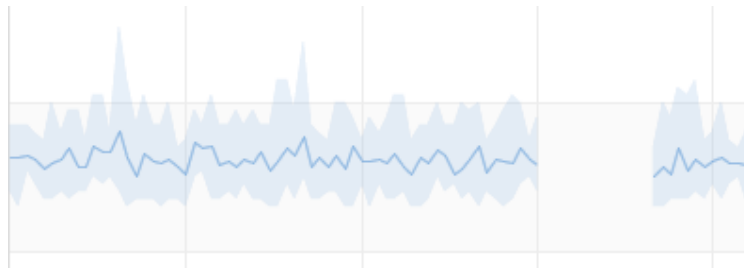
Monitoring

Updated Trend Viewer

NetCrunch trend viewer has been improved in order to better present various metrics collected by the program.

New features:

- More chart display types (trend, trend + range, stacked, area) - range charts automatically display min, max and average data.
- Custom series scaling and adjustable units
- Ability to compare counters across multiple nodes by choosing counter first, then selecting nodes for which it's been collected
- Various performance improvements



Monitoring

Monitoring Solaris Systems

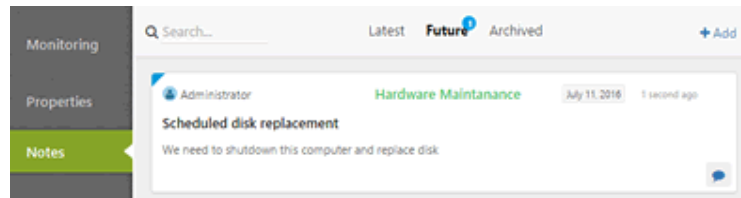
Program includes new SSH remote monitoring engine and Monitoring Pack for Solaris system, including monitoring over 30 disk related metrics.



Monitoring

New Node Notes

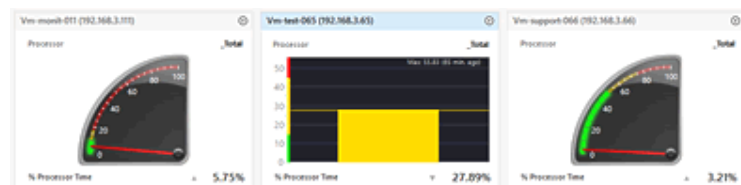
New window delivers better note management. Each note can be easily commented by NetCrunch users and can have labels and due date. Notes can't be deleted but you can archive them with single click.



Monitoring

Improved Performance Views

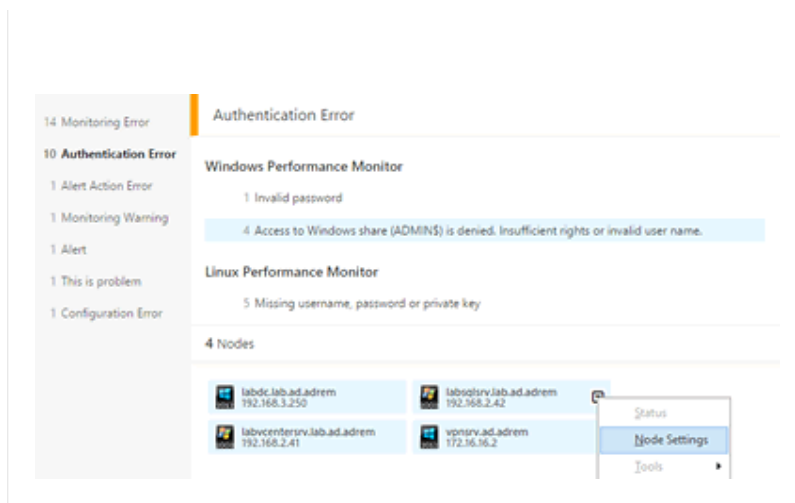
Bar chart has been improved and uses the same color schemes like other chart types. Additionally, small triangle next to the value shows the latest change direction. Charts support SNMP tick unit conversion to standard time units (seconds, milliseconds). All charts perform animations for better change indication.



Monitoring

Redesigned Monitoring Issue Window

New window allows easier reviewing and fixing all issue categories. You can select all nodes affected by the issue and fix it with one click.



Monitoring

New GrafCrunch version

New GrafCrunch version is based on stable version of Grafana 2.6. The most important feature for NetCrunch users is that you can now connect to multiple NetCrunch servers and create summary dashboards on a single screen.

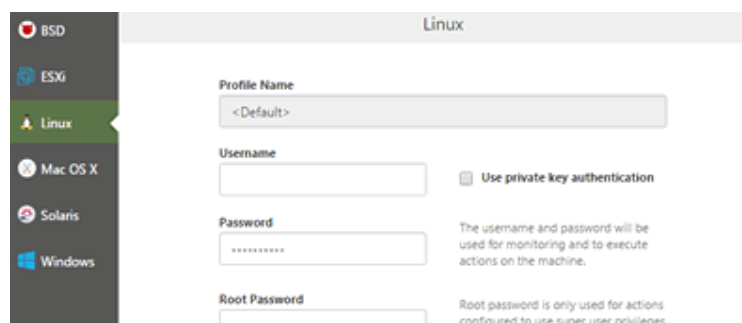
New features

- **Ability to connect to multiple NetCrunch Servers**
- Putting series from multiple datasources into a single chart
- New and much improved time picker
- New powerful and flexible table panel
- More axis units for graph (Length, Volume, Temperature, Pressure, etc)
- Graph option to hide series with all zeroes from legend and tooltip
- Resize the panel by dragging the lower right corner

Monitoring

New Credential Manager

Managing monitoring credentials has been moved to separate window and is much easier now.



Monitoring

Integration Module

NetCrunch offers integration for several external service desk and messaging services. It means that when NetCrunch opens an external ticket, it can also automatically close this ticket when the alert is closed. Two way integration also allows for alert to be automatically closed in NetCrunch after the ticket had been closed in the external system. Current version supports the most popular services, but more integration will be added in the future versions.

Integration Module includes two parts:

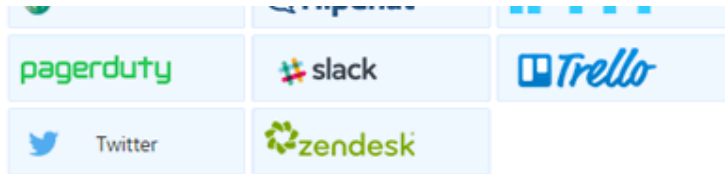
Integration Profiles

Allow to set communication channel with external services

Integration Actions

used to trigger messages and ticketing actions. Available integration for: freshdesk, HipChat, IFTTT, pagerduty, slack, trello, twitter and zendesk





Monitoring

Monitoring Improvements

SNMPv3 improvements

NetCrunch supports alerts using additional field (context) for SNMPv3 monitoring. It allows monitoring layer 2 segments on Cisco switches using SNMPv3.

SNMP String Value Monitoring

NetCrunch supports alerts based on string SNMP value conditions: equals to, not equals to, contains, not contains, matches regular expression, change (any to any)

Better disk space monitoring on all Unix family systems

New versions extends disk monitoring capabilities for each Unix family system. This is based on *iostat* tool features available on particular system.

- o 14 new disk metrics for BSD system
- o 4 new disk metrics for Mac OS X
- o 28 new disk metrics for Linux
- o 32 disk metrics available for Solaris

Interactive Sensor Testing

After configuring sensor you can test its configuration by using new **Test** button.

New Monitoring Packs

- o HP ProCurve Switch
- o Sophos Antivirus Server
- o vCenter Server 6.0
- o Cisco ASA VPN Tunnels Statistics
- o Cisco Unified Communications Manager
- o Java Application Server (SNMP)
- o Veeam Backup and Replication Server
- o Barracuda Firewall
- o Generic Printer

Monitoring of WebMessages (alerts can be send using REST API)

NetCrunch 9.2 adds another tab in the external events window. Messages can be send using REST API using HTTP protocol from any application. After receiving it you can create an alert for such external message. It works in very similar way to syslog messages and SNMP traps.

Monitoring

Other UI changes

Ability to disable task auto popup

Now you can switch off auto popup feature and only observe blue dot with number of tasks that require you attention.

New Filtering conditions

Now you can create view for nodes having IP address assigned or not assigned.

(WebAccess) Node Properties Tab

Node properties are accessible in WebAccess in read-only mode.

(WebAccess) Auto collapsing Atlas Tree

When no maps are available for the user (due to access rights settings), the Atlas Tree is automatically collapsed.

SNMP MIB search improvement

You can use multiple words when searching MIB objects (i.e. cisco status)

Manage Monitoring Packs folders

You can rename and add new folders in Alerting & Reporting Settings window.

9.1

(February 2016)

Monitoring

New Monitoring Sensors

Email Alert Sensor (POP3, IMAP4)

Trigger alerts based on an email sender, subject or body. The sensor can match emails using simple text patterns or regular expressions.

Mailbox Sensor (POP3, IMAP4)

This sensors allows you to monitor of mailbox authentication, activity, performance and size. You can check if the mailbox is properly processed by checking the oldest email in the mailbox or when the last message has been received.

Text Log Sensor (XE Edition)

This sensor parses files and converts each entry into a list of properties which later can be filtered like any other type of logs (window event log, syslog). This gives you more control over how alerts are triggered and also allows for better analyzing of the collected log entries in the event log.



Alerting

Alerts

Alert on Issue

Trigger alert on monitoring issues. For example when authentication fails.

Encoding Support for Syslog & SNMP Traps

You can specify code page encoding for Syslog and SNMP traps.

Actions

New actions that give you more control over monitoring and Atlas Views.

Modify Custom Field

You can change or clear the node custom field. Because you can use custom fields to create dynamic views, this feature can help you create views that are controlled by NetCrunch alerts.

Change Node Monitoring Time

You can control node monitoring time when an alert occurs.

Monitoring

Text Parsing Expressions

NetCrunch 9.1 introduces parsing expressions which allows you to describe how to parse external text data. You can use regular expressions and other patterns. Parsing expressions allows you to parse a given text (line of the log or file) and outputs a list of key-value pairs.

For Text Logs

You can define the format of each line which is converted to a list of properties (key-value pairs), which can then be easily filtered, stored and alerted on specific parameters. This turns text logs into regular logs with fields that can be later processed.

For Processing Emails

NetCrunch can trigger alerts on emails received. To simplify processing alerts you can parse emails and store all data as event parameters.

Name:

Type:

Regular Expression:

Variables: + Add

Date	1999-11-27
Time	15:49:37,459
Thread	thread-x
Severity	ERROR

Test Text:

```
1999-11-27 15:49:37,459 [thread-x] ERROR mypackage - Catastrophic system failure
```

UI Improvements

Improved Dynamic Views

Now you can create dynamic views on **pending alerts** and **relative time expressions**. This allows to create views containing node with certain pending issues. Time expression can be used to manage expiration or maintenance dates. For instance, you can set date of maintenance and create view of nodes that needs maintenance in less than week.

Recently Resolved Views

We added new views to the event log that allow you to see resolved issues within a selected time range. For example, you can quickly find all issues resolved after more than 1 hour in the last 24hrs. On the other hand, you can find out which alerts have been solved in less than 10 minutes, which may indicate settings that are too sensitive.

Redesigned Message Format Editor

The new editor is much easier to use and allows you to create custom formats. It also allows for customizing messages sent on alert close.

On Alert On Close

Subject: + Add Parameter

```
{Common.Severity} NetCrunch Alert - {Common.AlertInfo}
```

Header: + Add Parameter

```
NetCrunch Alert
```

Sections: + Add...

Alert	
Received at:	{Common.Time}
From:	{Properties.DisplayName}
MAC Address:	{Properties.HardwareAddress}
Event	
-	

Other improvements

Improvements

SSH Public Key Authentication

Now you can choose to use passwords or public key authentication for SSH monitors (Linux, BSD, Mac OS X)

Set Web Page Sensors for multiple ports

Now you can add multiple sensors with the same url but different ports when you run multiple HTTP servers on a single node.

Monitoring ESX Datastores

Now you can set alerts on ESX datastore metrics. The datastore view is also available in the Node Status window.

Extended NetCrunch Service Restart Option

You can schedule restart of NetCrunch service weekly at given time. You can also see when next restart is planned.

9.0

(November/December 2015)

Architectural Changes

64 bit Server

The NetCrunch Server is now a 64-bit application built for high performance and memory scalability.

MIB Compiler is available in the Remote Console now

The MIB Compiler was one of the server components that couldn't be accessed from the remote console.

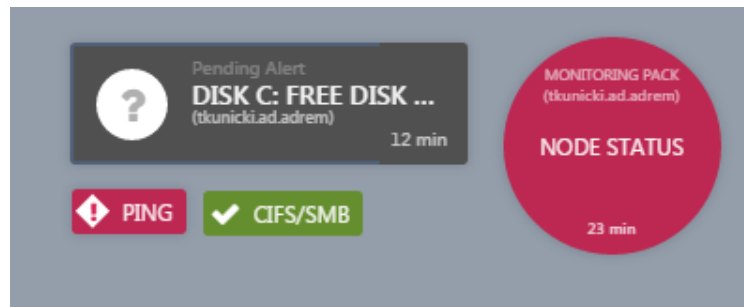
Program Folders have been changed

As a 64-bit program, the NetCrunch Server installs in the "Program Files" folder now. Program data paths no longer contain version numbers and NetCrunch will use the same data folder in future versions.

Status Widgets

NetCrunch introduces 3 new widgets allowing you to display the status of program objects such as:

- Network Service Status
- Monitoring Pack Status
- Interface Status
- Sensor Status
- Alert Pending Status



External Events Window

All Incoming traps and syslog message (even from nodes not being monitored in Atlas) are visible in the External Events window. With a single click, users can convert them into alerts (the node will be added to Atlas if necessary). In this way, NetCrunch allows you to define alerts for traps "by example".

Monitored	Received	Atlas Node	Severity	Facility	Address	Message
	4 weeks ago Sunday, September 27, 2015 10:18:46pm	tkunicki.ad.adrem (192.168.10.30)	Emergency system is unusable	kernel messages	192.168.10.30	Test 12
	4 weeks ago Sunday, September 27, 2015 10:18:46pm	tkunicki.ad.adrem (192.168.10.30)	Emergency system is unusable	kernel messages	192.168.10.30	Test 12
	4 weeks ago Sunday, September 27, 2015 10:18:46pm	tkunicki.ad.adrem (192.168.10.30)	Emergency system is unusable	kernel messages	192.168.10.30	Test 12
	4 weeks ago Sunday, September 27, 2015 10:18:46pm	tkunicki.ad.adrem (192.168.10.30)	Emergency system is unusable	kernel messages	192.168.10.30	Test 12

Conditional Alerts

The simplest condition is to trigger an alert when an alerting condition is met. But what about something that did not happen? Like a scheduled backup?

Among the alerting possibilities of NetCrunch, you can define an alert for when a specific event did not happen in a certain time range or after specified time (backup not completed or heartbeat not received). Other conditions allow you to suppress alert execution for some time. For example, power loss should trigger an alert after several minutes. If power is restored within a given time, no action should be executed.

Advanced Correlation

Advanced correlation allows also you to trigger events only if multiple events have happened within a given time range, or are pending at the same time.

For example, this allows you to define an alert when two redundant interfaces are down.

Monitoring

IP SLA Operation Sensor

NetCrunch allows you to monitor Cisco IP SLA operations. It tracks the status of operations and also performance parameters. This allows you to monitor VOIP jitter and other protocols.

The Node Status Window can display the status of all operations defined on devices.

All	Monitored	Search...
✖	TCP Connect[300] To: 192.168.1.115 on port 5000	Operation did not occur because no connection (session) exists with the target
✔	ICMP Echo[301] echo to slawek To: 192.168.3.56	1 ms
✔	DNS[302] Name server: 192.168.3.250, query: www.adrensoft.com	1 ms
✔	HTTP[303]	871 ms
✖	UDP Echo[304] To: 192.168.1.115 on port 5000	Inactive
✔	DNS[305] DNS (onet.pl) Name server: 192.168.3.250, query: www.onet.pl	17 ms

UI Improvements

Extended Time Range Schema

Time Range schema is used in many places like: monitoring time restrictions, alert time restriction, conditional alerts and others. Now, you can define complex schema for each weekday.

Default range	between	▼	08:00	20:00
Monday	default	▼	(between 08:00 - 20:00)	
Tuesday	default	▼	(between 08:00 - 20:00)	
Wednesday	between	▼	08:00	22:00
Thursday	default	▼	(between 08:00 - 20:00)	
Friday	default	▼	(between 08:00 - 20:00)	
Saturday	never	▼		
Sunday	never	▼		

[Reset All to Default](#) [Clear All](#)

Alerting

Extended Action Conditions

Each action can be limited to run only if a triggering network node belongs to a given atlas view (these can be created by rules or manually) or within a given time range.

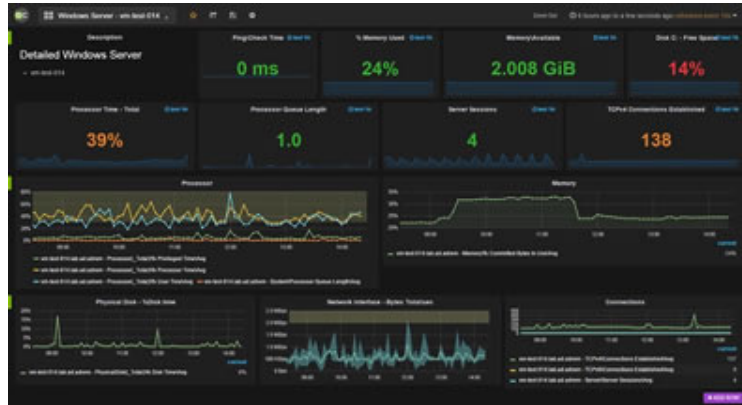
This allows you to create flexible alerting scripts, for instance sending different notifications depending on the node location.

UI Improvements

GrafCrunch - Dashboard Server

GrafCrunch is a fork of the open source performance visualization project Grafana. It increases the possibilities of creating live performance dashboards and allows you to present data from various sources.

The installer automatically handles connecting it to the NetCrunch Server.



Monitoring

NetCrunch Self Monitor

NetCrunch now has its own monitor which tracks various NetCrunch Server parameters and triggers notifications to administrators if any problems occur. Program will alert you on overloaded components, when a new version is available, or if your maintenance subscription is about to end.

❌ SNMP monitoring overloaded	Default	Enabled
⚠️ SNMP monitoring overloaded	Default	Enabled
⚠️ Network Services monitoring overloaded	Default	Enabled
❌ Database overloaded. Some events have been dropped	Default	Enabled
⚠️ Writing to database is slow	Default	Enabled
❌ Low disk space. Please free up some space on the disk where NetCrunch holds the data	Default	Enabled
⚠️ Low disk space. Please free up some space on the disk where NetCrunch holds the data	Default	Enabled
❌ The system is low on memory	Default	Enabled
⚠️ The system is low on memory	Default	Enabled
❌ Server memory usage is too high. Please restart the NetCrunch Server	Default	Enabled

UI Improvements

Various UI Improvements

Server Task Notification Window

This pops up when some task is executed by the NetCrunch Server and might need administrator attention. For example, the node auto discovery process might put a notification here and wait for your decision about which nodes should be added.

Map Editor Improvements

- Live updates
- Fixed scaling of background images
- Improved adding shapes

Added UI Tour in node settings window

Node monitoring settings are a complex yet powerful tool, so when you forget where to go, NetCrunch can guide you interactively.

Ability to Setup Custom Image in Reports Footer

You can now add your logo to report footers.

Alert Notifications List Improved

The list makes it clear when a notification has been sent, an alert is being closed, or a reminder has been sent after some time since an alert occurred.

Favorite Views changed to Bookmarks

Favorite Atlas views has been moved from the bottom of the Atlas Tree window to the top popup menu.

UI Improvements

SNMP Traps simplified

Receiving and setting SNMP trap has been simplified.

Node does not need SNMP monitoring to be enabled

Currently you can receive traps even if the node has no SNMP monitoring enabled.

Separate SNMPv3 trap profiles

SNMPv3 requires only defining global authentication profiles. No individual node setting is required.

Turn traps into alerts with one click

NetCrunch receives all traps by default, even from nodes not monitored in the Atlas. These traps are visible in the External Events window and you can turn received traps into an alert with a single click.

Other improvements

Maintenance Updates

Various program components have been updated such as:

- Device Type Definitions
- OpenSSL components
- Icons for new system versions (OS X and Windows 10)
- Support for Windows 2016 Server
- Documentation Updates
- Over **400** change requests done

Monitoring

Extended Network Service Monitoring

NetCrunch 9 adds monitoring of common services over SSL like:

- Secure LDAP
- POP3/s
- SMTP/s
- IMAP/s
- FTP/s

Also you can define custom services using SSL connection. Additionally PING checking method has been changed to use system software for more accurate measurement.

[Check version 8 features... \(/netcrunch/whatsnewv8/\)](/netcrunch/whatsnewv8/)