

# Server Monitoring Procedure

Superior Essex, Essex Furukawa, IVA Europe  
Document Number: IT001

## Overview

### Purpose

This policy outlines the procedures, responsibilities, and scope of server monitoring for the Information Technology (IT) resources of Superior Essex, Essex Furukawa, IVA Europe.

### Authority

This policy has full support of The Company's IT Europe director. The IT manager administers the procedure, which is currently effective for all of The Company's servers.

## Server Monitoring Procedure

### Mission

The IT objective of The Company is to enable Company employees to perform their tasks with technology that is in good operating condition, available and performing as expected while appropriately addressing the business needs and keeping information secure, within our IT resources.

### System Health Monitoring Procedures

The Company operates a lights-out environment. As such, relies on automated systems to alert the support group of a monitoring event.

IT technicians monitor servers with software named ORION.

Minimum monitoring requirements are:

- System active as noted by a response to either a ping or an SNMP periodic query.
- Hardware health as monitored by automated systems including: Disk Arrays, Power Supply's, CPU's, Memory, Environmental Sensors, and Cooling Fans.
- Logical drive capacity should be tested on all systems to determine available disk space. A limit level of no less than 95% should be periodically monitored for all disk drives with substantially lower levels.
- CPU utilization should be tested periodic application-dependent and configuration-dependent. Best practices should be tailored to the machine and application.
- Other monitoring limits should also be applied as needed by the application and machine configuration such as, rate of change of available memory, rate of change of available disk space, and application alerts as is appropriate.

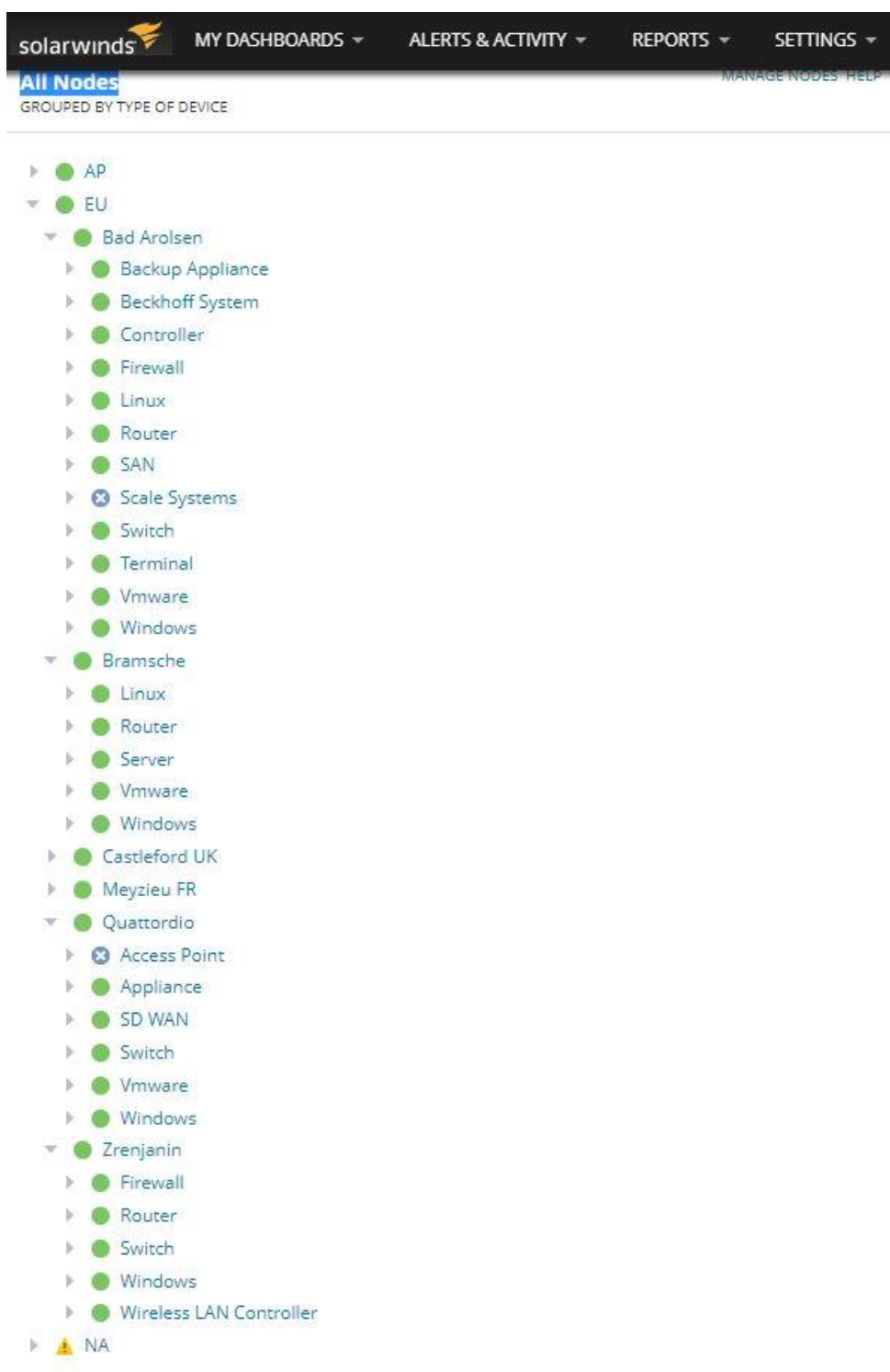


Figure 1EU list of monitoring

## Alerts

When a monitoring event is detected an email notifying the appropriate support personnel of the event should be sent when possible. At least two emails to two different destinations should be sent for all events if possible.

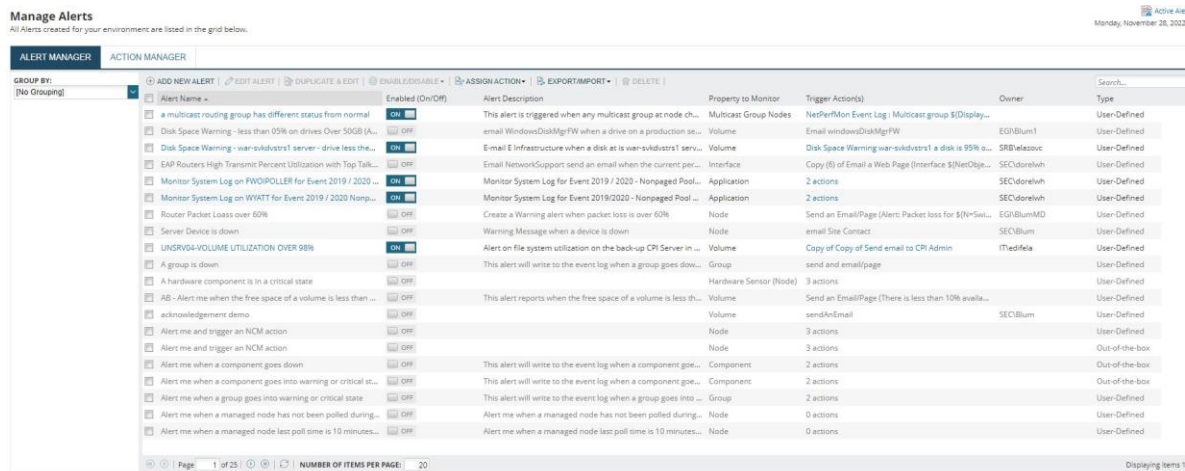


Figure 2Alerts

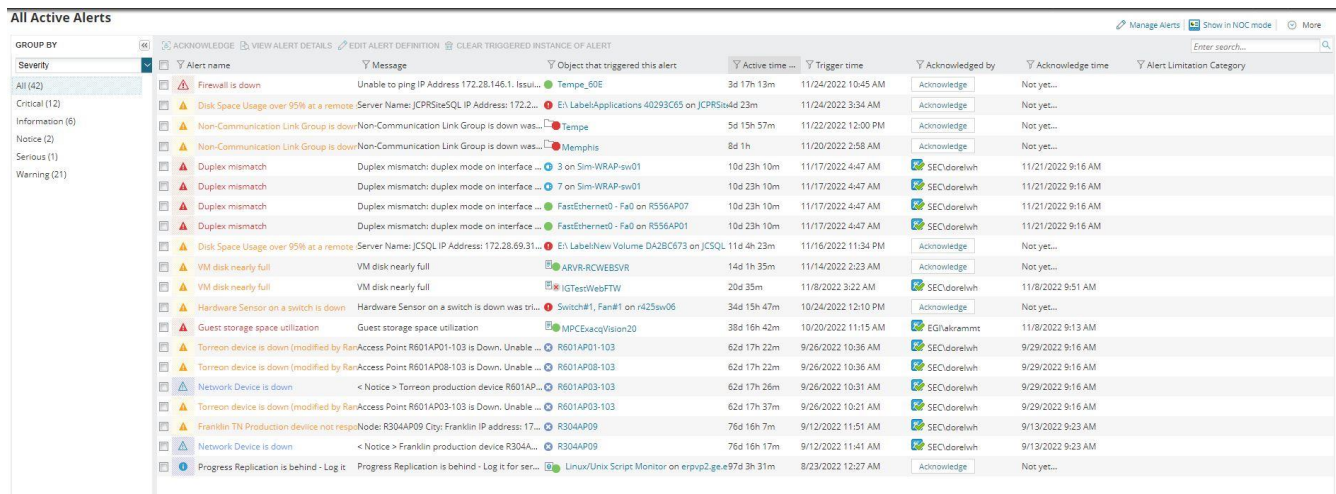


Figure 3Active alert

## Node tracking

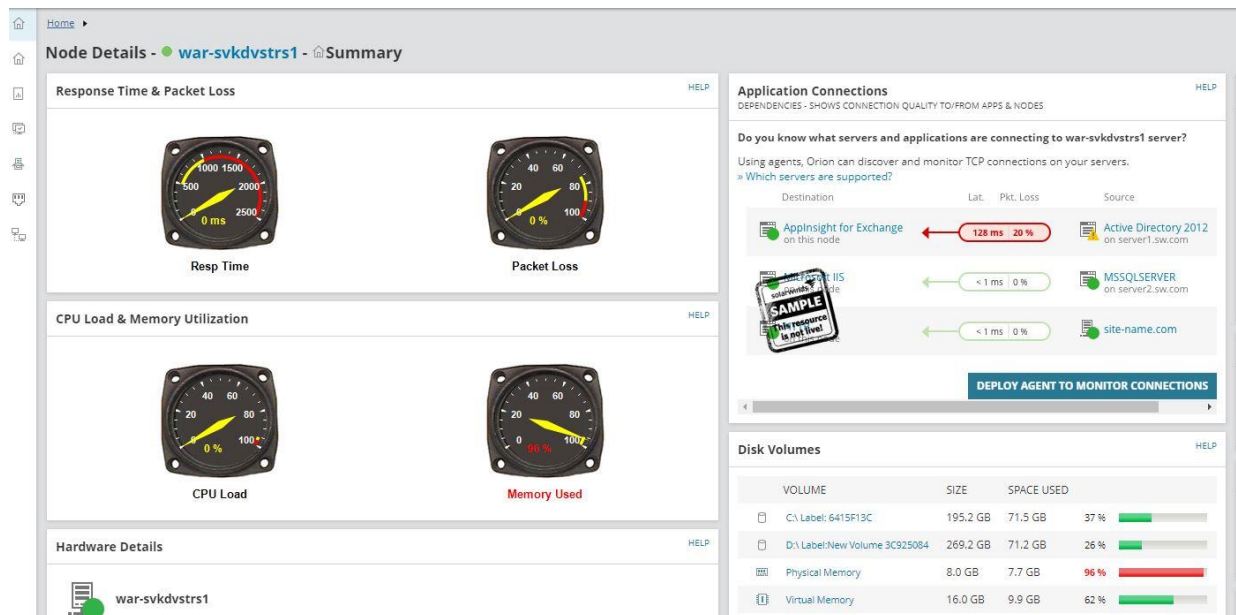


Figure 4Node detail



Figure 5 Node alert default

## Event search

### Events

**Events From All Network Devices - Today**

**FILTER DEVICES:** Network Object: **All Network Objects** | Type of Device: **All Device Types**

**FILTER EVENTS:** Event Type: **All events**

Time Period: **Today**

Number of displayed events: **500** ☐ Show Cleared Events

**REFRESH**

**SELECT ALL** **DESELECT ALL** **CLEAR SELECTED EVENTS**

TIME OF EVENT	MESSAGE
<input type="checkbox"/> 11/28/2022 3:55 AM	Component "% Processor Time" for application "Windows Server 2019 Services and Counters" on node "AT-PR-EDGE" is up
<input type="checkbox"/> 11/28/2022 3:52 AM	Path SMOD-MDT1 to 10.8.0.1 changed its status to Good
<input type="checkbox"/> 11/28/2022 3:52 AM	Hardware health monitoring on EAPESX01 is Critical
<input type="checkbox"/> 11/28/2022 3:52 AM	Hardware sensor Disk 70 on HPSA1 : Port Box 0 Bay 255 : 0GB : Unconfigured Disk : Disk Error of hardware health monitoring on EAPESX01 is Critical
<input type="checkbox"/> 11/28/2022 3:52 AM	Hardware type Disk of hardware health monitoring on EAPESX01 is Critical
<input type="checkbox"/> 11/28/2022 3:51 AM	Application "Active Directory" on node "QUPR-ITDC01" is in a warning state
<input type="checkbox"/> 11/28/2022 3:51 AM	Component "Attempted to logon using explicit credentials event" for application "Active Directory" on node "QUPR-ITDC01" is in a warning state
<input type="checkbox"/> 11/28/2022 3:50 AM	Path SMOD-MDT1 to 10.8.0.1 changed its status to Warning
<input type="checkbox"/> 11/28/2022 3:50 AM	Component "Worktables Created/sec" for application "MSSQLSERVER" on node "SUZAPP" is in a warning state
<input type="checkbox"/> 11/28/2022 3:50 AM	Component "SQL Agent Job Info" for application "MSSQLSERVER" on node "SUZAPP" is in a critical state
<input type="checkbox"/> 11/28/2022 3:50 AM	Component "% Processor Time" for application "Windows Server 2016 Services and Counters" on node "AT-PR-FTP01" is in a critical state
<input type="checkbox"/> 11/28/2022 3:50 AM	Component "SQL Server" for application "MSSQLSERVER" on node "FRPRSQW01" is up
<input type="checkbox"/> 11/28/2022 3:49 AM	AT_DB_NFS_SVM_N2_edbpro_progressal_nfs_vault Critical. Latency(Total), Latency(Other) exceeded Critical threshold(s).
<input type="checkbox"/> 11/28/2022 3:49 AM	vol_julius_gendata Up.
<input type="checkbox"/> 11/28/2022 3:49 AM	vol_test_general_02 Warning. Latency(Other) exceeded Warning threshold(s).
<input type="checkbox"/> 11/28/2022 3:49 AM	AT_P_CIFS_SVM_N2_cabcad_vault Warning. Latency(Read) exceeded Warning threshold(s).
<input type="checkbox"/> 11/28/2022 3:48 AM	/vol/vol_julius_gendata/lun_julius_appsvg Up.
<input type="checkbox"/> 11/28/2022 3:48 AM	/vol/vol_oddjob_gendb/lun_pconv Up.
<input type="checkbox"/> 11/28/2022 3:48 AM	/vol/vol_general_data_1/lun_work Up.
<input type="checkbox"/> 11/28/2022 3:48 AM	/vol/vol_test_general_02/lun_test_general_02 Warning. Latency(Read) exceeded Warning threshold(s).

Figure 6 Event search example

**Service Impact Notification**

Should user services be impacted notification should be communicated to the affected group as well as communicated to the Europe IT technician team.

**Responsibilities**

IT has the responsibility to enforce this policy. This can be done through systematic means and interaction with users. The Systems Infrastructure and Support group are principally responsible for monitoring all servers.

## Continuance

This policy is a living document and may be modified at any time by the IT manager, the executive steering committee, or the human resources department.

## Summary

This policy is designed to assure IT resources are in good operating condition, available and performing as expected. This enables The Company to achieve its business objectives. Full cooperation with this policy is appreciated so that all goals can be met in accordance with the business objectives.

## Records

Records Identified	Storage Method	Method of Protection	Retrieval Process	Retention Time	Disposition Process
None	NA	NA	NA	NA	NA

Revision Master			
Date	Section	Author	Description
10/18/04	All	J. Farmer	Original Issue
10/28/04	All	J. Farmer	Updated to include security and server monitoring details
6/1/05	Header	J. Farmer	Updated Logo and Company name in Title
10/12/06	Security Monitoring	J. Farmer	Added Linux secchk procedures
10/23/06	Security Authentication Verification	J. Farmer	Updated security sweep procedures.
7/25/08	Monitoring Procedures	J. Farmer	Removed references to Novell, changed log inspection to on demand for windows servers with goal to install automated system for log inspection. Changed Heat Ticket to Support Ticket.
8/25/08	ALL	S. Thomas	Removed all references to Novell.
6/16/09	ALL	J. Farmer	Remove UNIX monitoring
10/1/2013	Security Authentication Verification	J. Farmer	Assure employees belong as member of groups with their manager.
01/12/2022	All	Z. Petkovic	Add EU parts and real examples