



# Getting Started PowerSC Real-Time Compliance

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Presentation Version 2

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## Why Real-Time Alerts?

- Don't wait for the yearly audit
- Don't wait for that daily, weekly, monthly script to run and report your security
- Get alerted of a security mistake or hacker, the same second it happens so you can react, immediately.

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PowerSC Real-Time

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**Managing Security and Compliance in Cloud or Virtualized Data Centers Using IBM PowerSC**

Design for enterprise security and compliance in a cloud and virtualized environment  
 Complete information about architecture and components  
 Real-world scenarios with hands-on details

Axel Buecker  
 Fernando Costa  
 Rosa Davidson  
 Enrico Matteoli  
 Gerard North  
 David Sherwood  
 Simon Zaccak

**Redbooks**

ibm.com/redbooks

Released in 2013  
 PowerSC Redbook  
 See Chapter 4, ~20 pages

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PowerSC Editions	Express	Standard
<ul style="list-style-type: none"> <li><b>PowerSC Express</b> – Basic compliance for AIX</li> <li><b>PowerSC Standard</b> – Security and compliance for virtual &amp; cloud environments</li> </ul>	Security & Compliance Automation Trusted Logging Trusted Boot Trusted Firewall Trusted Network Connect & Patch Mgmt Real Time Compliance	✓ ✓ ✓ ✓ ✓ ✓ ✓

Trusted Surveyor ##	PowerSC GBP/core	Express	Standard
Separate LPP & price			
UK List prices from mid-2012 = only indicative of a ball-park.			
Please ask for a current price in your country & currency.			
	<b>Small Blade up to 750</b>	£91.75 £15.53	£111.67 £22.34
	<b>Medium Power 770</b>	£229.38 £39.17	£281.41 £56.28
	<b>Large Power780 &amp; 795</b>	£458.77 £77.99	£558.35 £111.67

Top=1<sup>st</sup> Year License + 1 year SWMA  
 Bottom=Subsequent years = SWMA

## PowerSC Editions

- **PowerSC Express**
  - Basic compliance for AIX
- **PowerSC Standard**
  - Security and compliance for virtual & cloud environments

PowerSC Editions	Express	Standard
Security & Compliance Automation	✓	✓
Trusted Logging		✓
Trusted Boot		✓
Trusted Firewall		✓
Trusted Network Connect & Patch Mgmt		✓
Real Time Compliance	✓	✓

## Real-Time Compliance Pre-Requisites

- AIX 6 TL7+ or AIX 7 TL1+ with all service packs please
- Purchase PowerSC Express Edition
  - With Media
- Downloaded from PowerSC from ESS website as normal
  - Entitled Software Support - <http://www.ibm.com/servers/eserver/ess/index.wss>
- Alert Reporting is via email and/or SNMP trap
- It is assume you have email working from the AIX machine running RTC
  - If not, have fun with sendmail!
- Of course, email includes tablets & smart phones can be alerted as well as your service desk or operators
- Alternatively, have an SNMP server ready



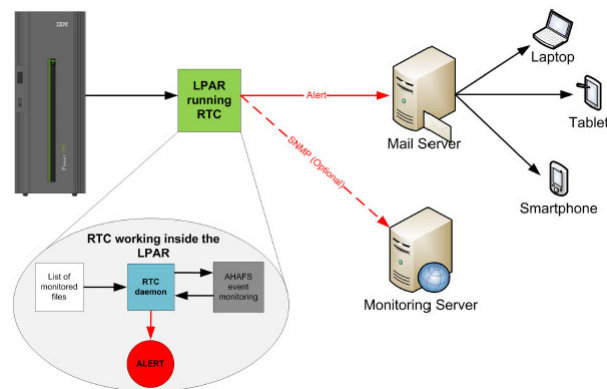
## Real-Time Compliance Pre-Requisites

PowerSC Standard Edition files

- ESD\_-\_PowerSC\_Standard\_Edition\_V1.1\_112012.tar.gz
- openpts.verifier
  - 1.0.0.0 Open Platform Trust Services - verifier
- powerscExp.ice
  - 1.1.2.0 ICE Express Security Extension
- powerscExp.license
  - 6.1.6.15 PowerSC Express Edition
- **powerscExp.rtc**
  - **1.1.2.0 Real-Time Compliance**
- powerscStd.license
  - 6.1.8.0 PowerSC Standard Edition
- powerscStd.svm
  - 1.1.2.0 Secure Virtual Machine
- powerscStd.tnc\_pm
  - 1.1.2.0 Trusted Network Connect for Patch Management
- powerscStd.vlog
  - 1.1.2.0 Virtual Log Device Software
- powerscStd.vtpm
  - 1.1.2.0 Virtual Trusted Platform Module

## Real-Time Compliance (RTC)

- Built around a AIX Autonomic Health Advisor File System (AHAFS1)
- As the resource is changed the AIX kernel immediately takes action
- No polling or cron scripts



## Real-Time Compliance (RTC)

- Configure with:
  - smitty RTC → set the email user(s), detail level, etc.
  - Or edit **/etc/security/rtc/rtcd.conf**
  - Then: **startsrc -s rtcd**
- It is an AIX subsystem:
  - **lssrc -s rtcd**
  - **stopsrc -s rtcd**
  - **startsrc -s rtcd**

## Real-Time Compliance (RTC)

- Information Levels:
- Infolevel:1
    - timestamp
    - sequence number
    - event producer return code
    - process info
    - program name
  - Infolevel:2 above plus
    - message of the event producer, if applicable
  - Infolevel:3 above plus
    - stack of the event, if applicable

## Real-Time Compliance (RTC)

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PowerSC Real-Time

Config file of pre-defined monitoring is in  
**`/etc/security/rtc/rtcd_policy.conf`**

`/etc/environment:`  
`eventtype = modFile`

*Valid are modFile, modFileAttr or both*

Edit this file then: **`stopsrc -s rtcd; startsrc -s rtcd`**

- Or use the **chsec** command  
Could be useful to remotely update lots of machines  
Also automatically restarts rtcd

## Real-Time Compliance Summary

1. Simple to implement & understand
2. Simple to extend to your own local needs
3. Immediate warning of unusual security changes
4. Need an escalation process to deal with problems



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