

The Siemens logo, consisting of the word "SIEMENS" in a bold, teal, sans-serif font, is positioned in the top right corner of the slide. The background of the slide is a photograph of a professional office environment with several people in business attire working at computers.

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Siemens Remote Service

Capitalize on a new dimension in system support

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Introduction / Contents

Siemens Remote Services (SRS)

Mastery of growth, dynamics and big diversity of systems in a complex environment – with HP Operations Manager, blue elephant systems MIDAS, HP Configuration Management and further tools.

Contents

- Siemens Healthcare objectives
- Siemens Remote Service - Overview
- Enhanced Productivity Services on top of SRS
- Tools for managing the Event Monitoring

Siemens Healthcare Objectives

Siemens Healthcare

First integrated diagnostics company



In-vivo diagnostics (Medical imaging systems ~ 191,000 in September 2007)



X-Ray



Computed Tomography



Magnetic Resonance



Molecular Imaging



Ultrasound



UPTIME Services

Healthcare IT

In-vitro diagnostics (Medical laboratory systems)



Immunodiagnosics



Nucleid Acid Testing



Clinical Chemistry



Hematology



Urinalysis



Lab Automation



Near Patient Testing



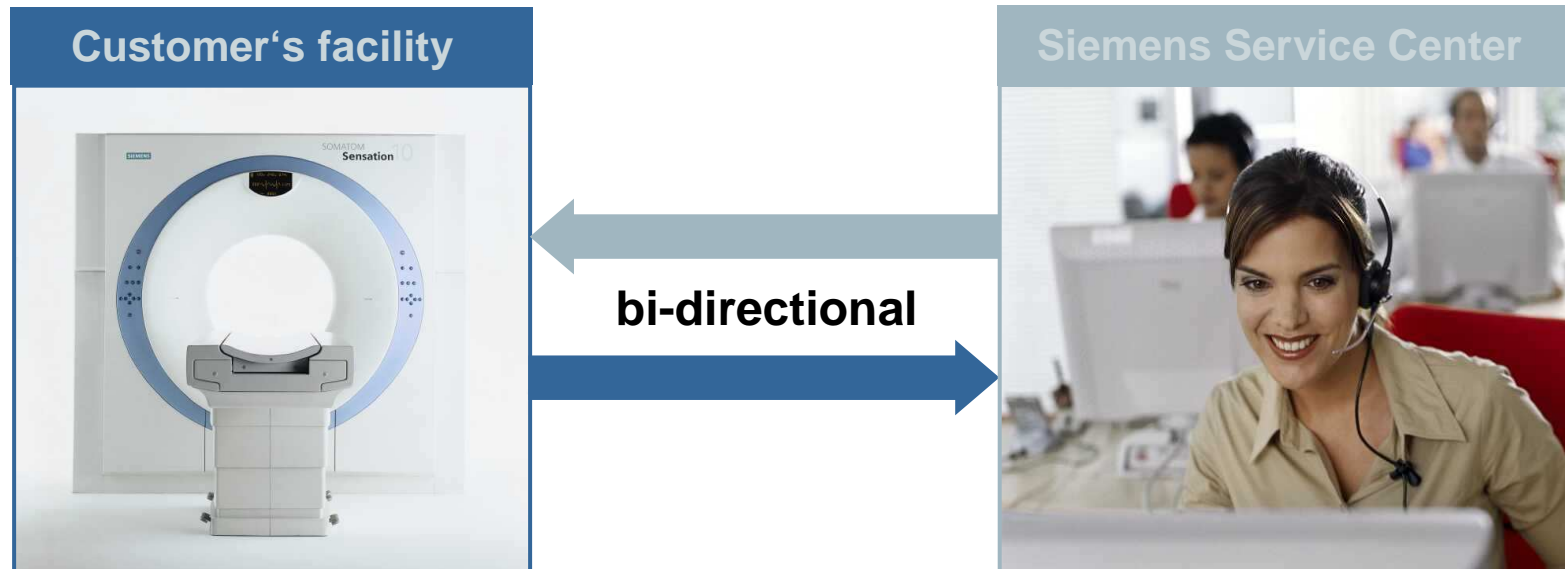
Regional Support Centers

- Support on 24 hours, 365 days worldwide
- 200 headquarter experts
- More than 500 regional support engineers
- “Follow the sun” concept
- On-line knowledge base providing comprehensive data for engineers
- Remote System Management (Event Monitoring & Software Updates) with Siemens Remote Service
- Remote Diagnosis and Repair with Siemens Remote Service

Siemens Remote Service - Overview

Siemens Remote Service

Capitalize on a new dimension in system support



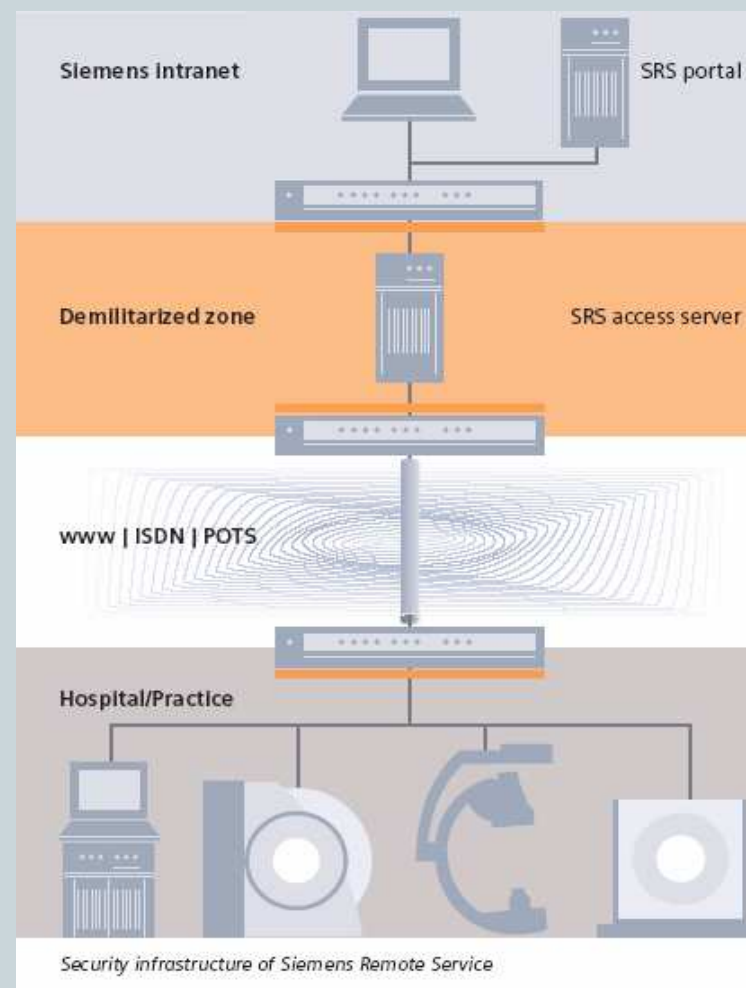
Siemens Remote Service combines high-tech medical engineering with state-of-the-art technology.

Siemens Remote Service

Data security and privacy as fundamental prerequisite

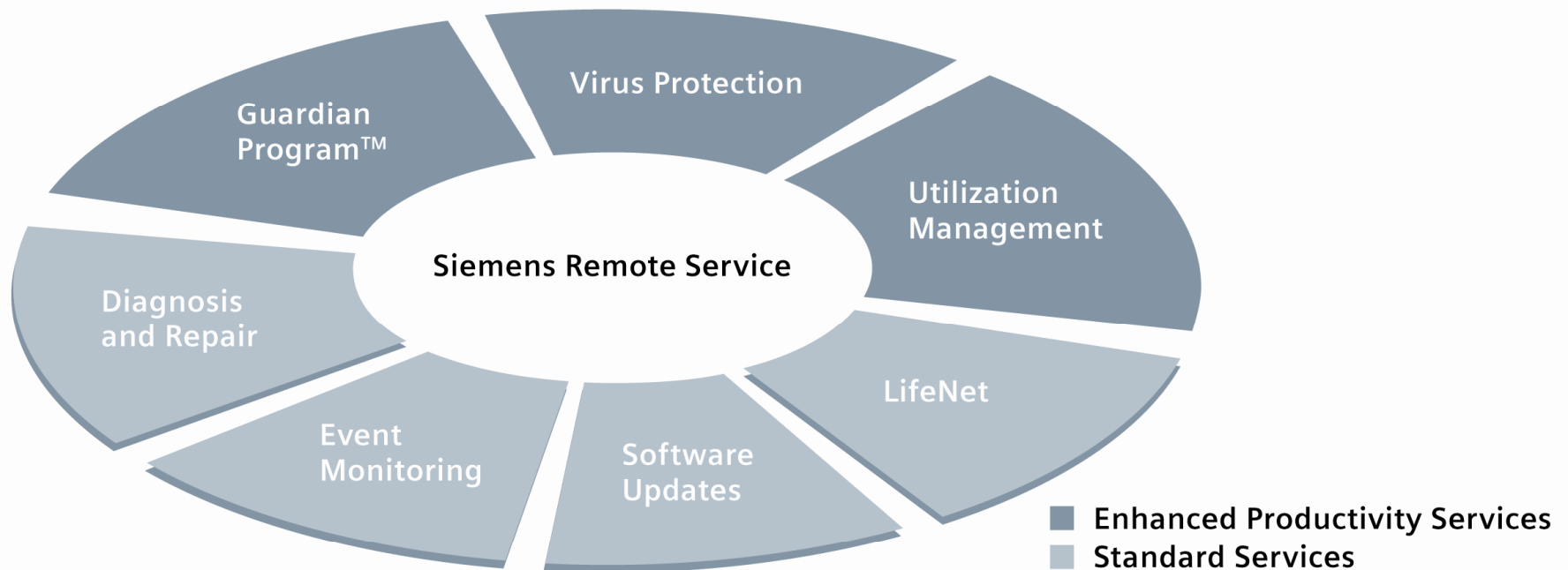
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- Most problems can be detected and corrected based on technical data from the system.
- Access to patient data is, in most cases, unnecessary.
- Should access to patient data become necessary, we require:
 - Sophisticated authentication and authorization procedures
 - State-of-the-art encryption technologies and logging routines together with
 - Strictly enforced organizational measures



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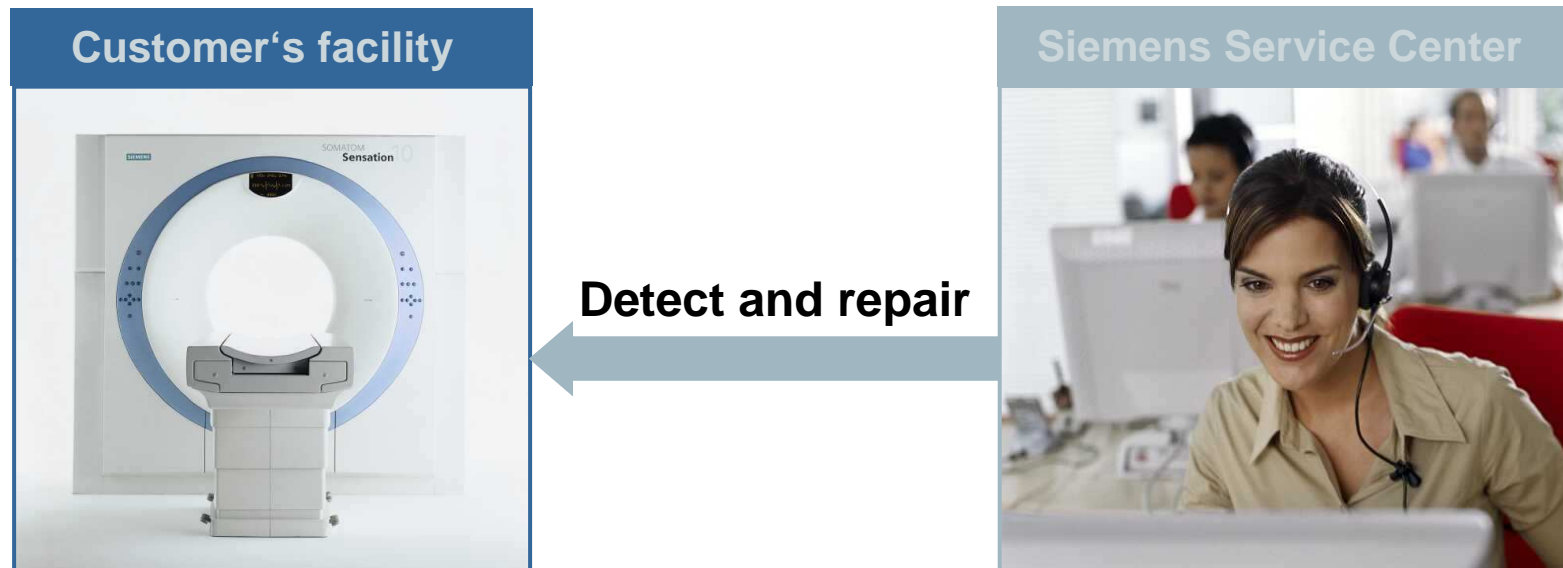
Standard Services and EPS



Diagnosis & Repair

> powered by Siemens Remote Service

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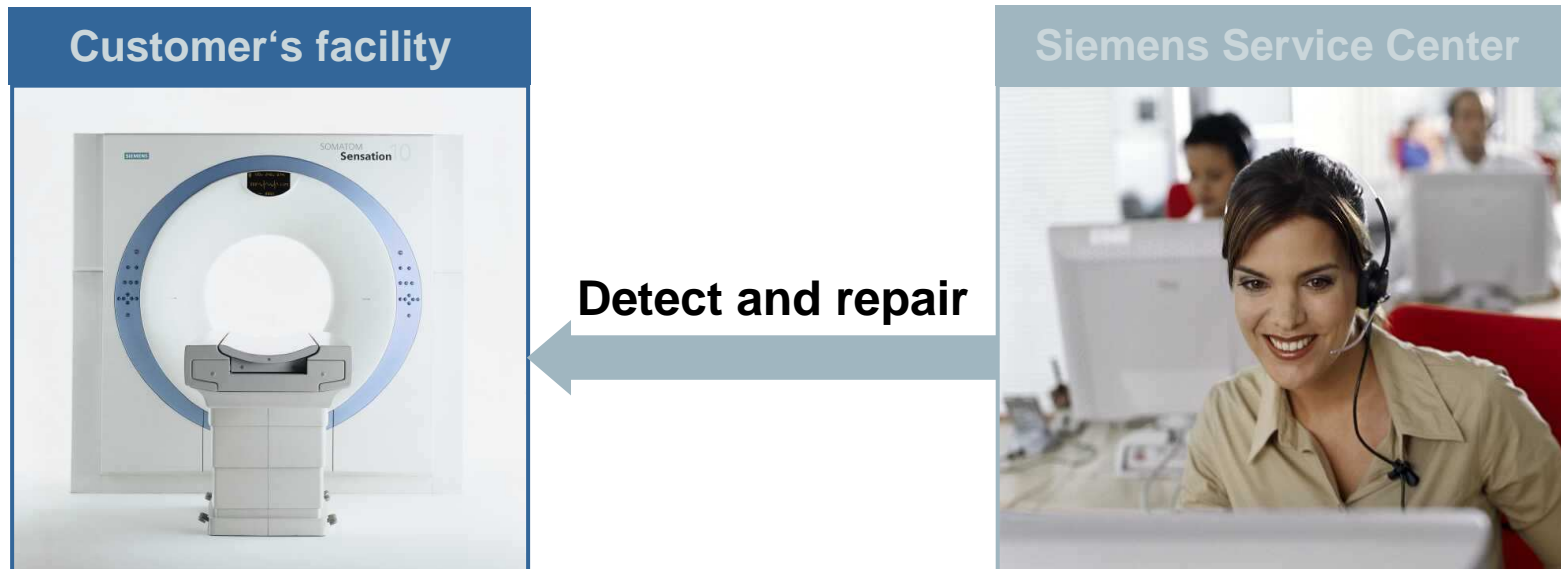


Key Benefits

- Faster Response
- Better Assistance
- Higher Uptime

Diagnosis & Repair

> powered by Siemens Remote Service

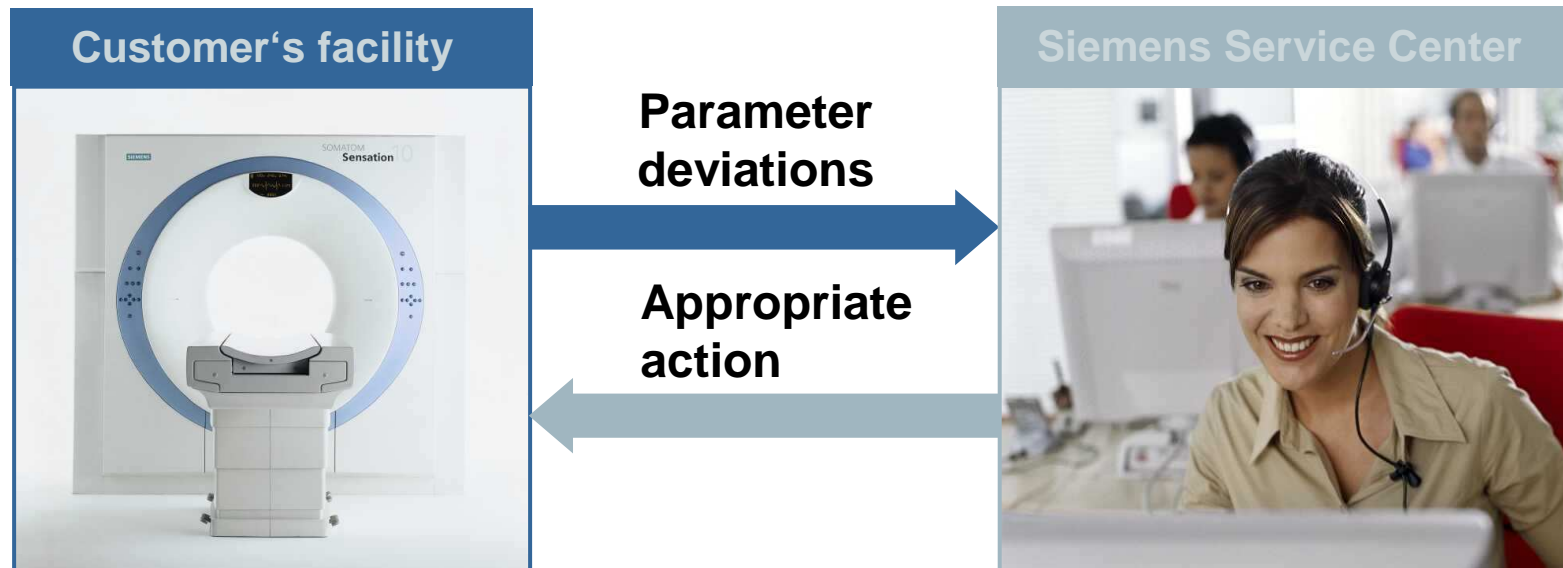


→ Diagnosis and Repair is based upon secure web technologies which allow a controlled access to the customer system.

Event Monitoring

> powered by Siemens Remote Service

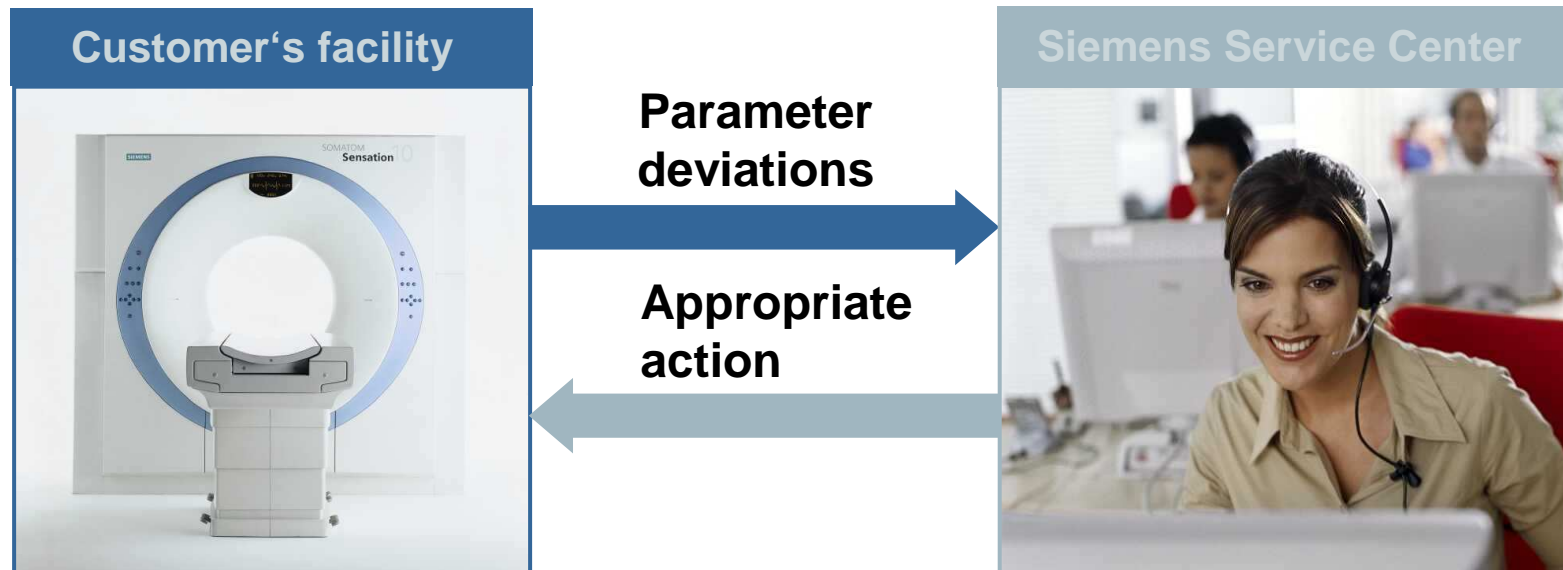
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- Key Benefits**
- Early detection of potential malfunctions
 - Scheduled on-site visits
 - Increased system availability

Event Monitoring

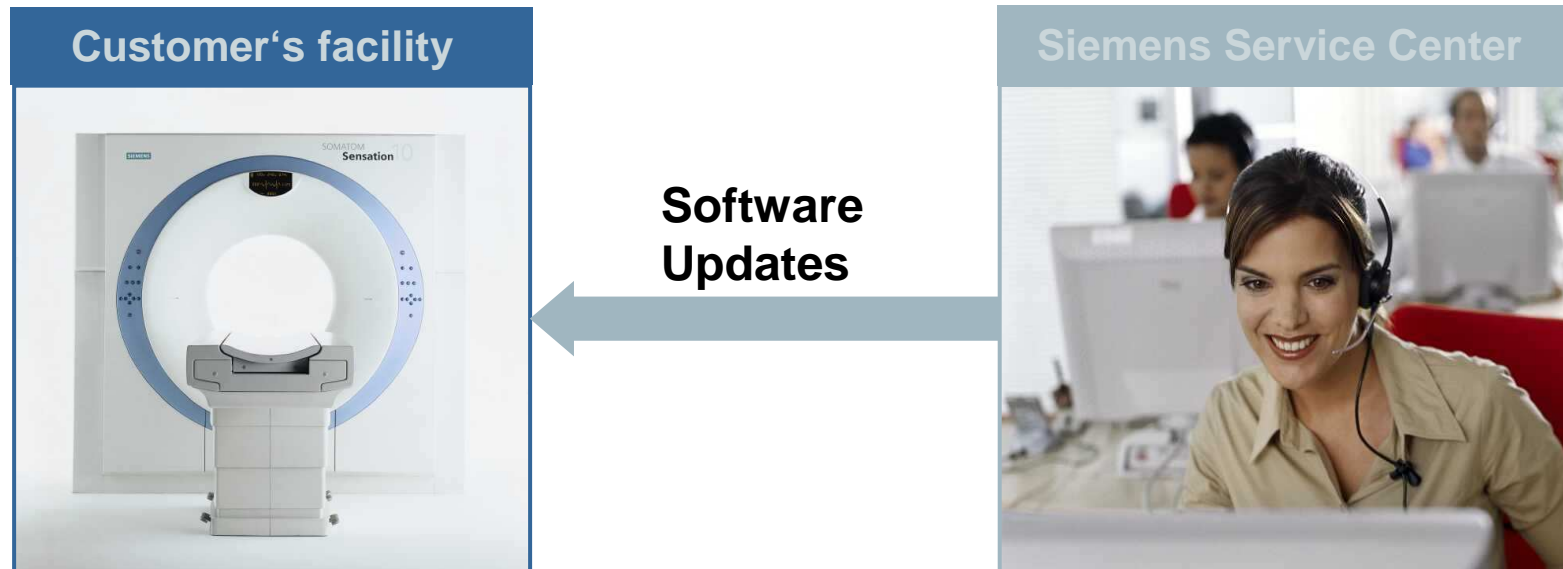
> powered by Siemens Remote Service



- Event Monitoring is based on agent technologies residing on the customer's device.
- Agents are also able to “react” on parameter deviations with defined local actions which can initiate a Self-Repair.

Software Updates

> powered by Siemens Remote Service

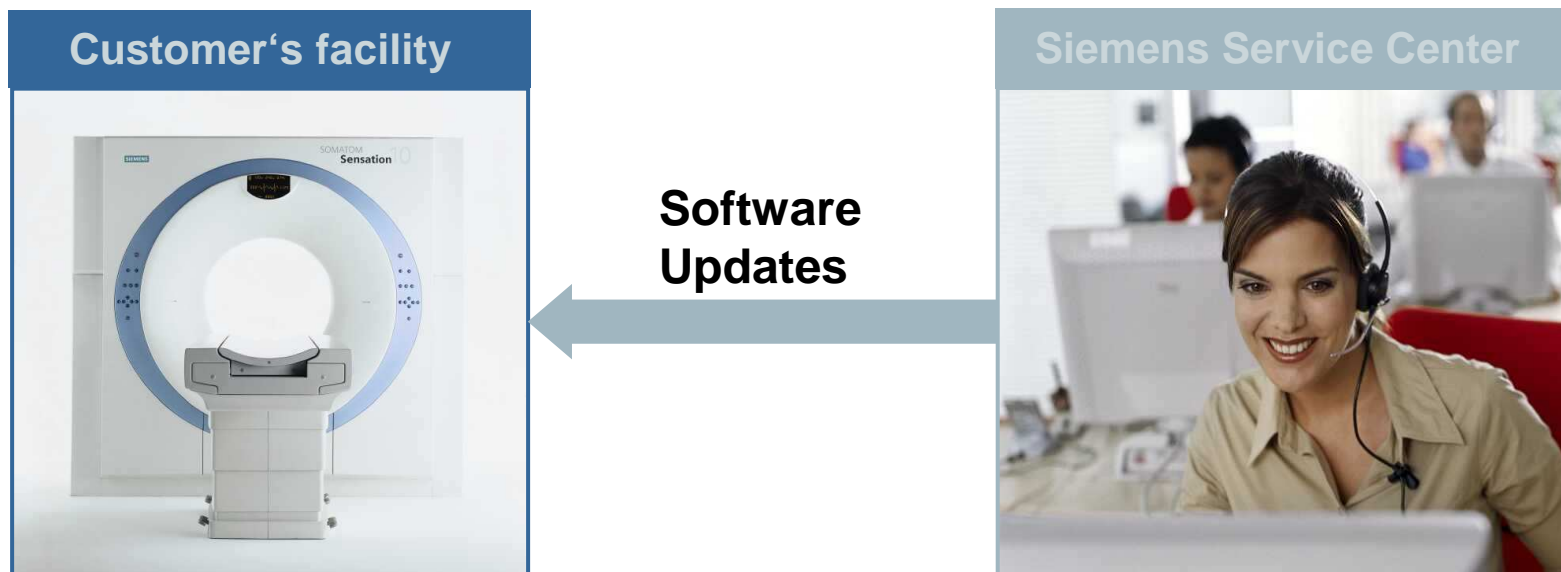


Key Benefits

- Uninterrupted workflow
- Investment protection: System follows state-of-the-art

Software Updates

> powered by Siemens Remote Service



- Distribution of software updates is based on agents residing on the customer's device.
- The agents allow software downloads in "Push" or "Pull" mode.

Enhanced Productivity Services on top of SRS

Guardian Program™

> powered by Siemens Remote Service

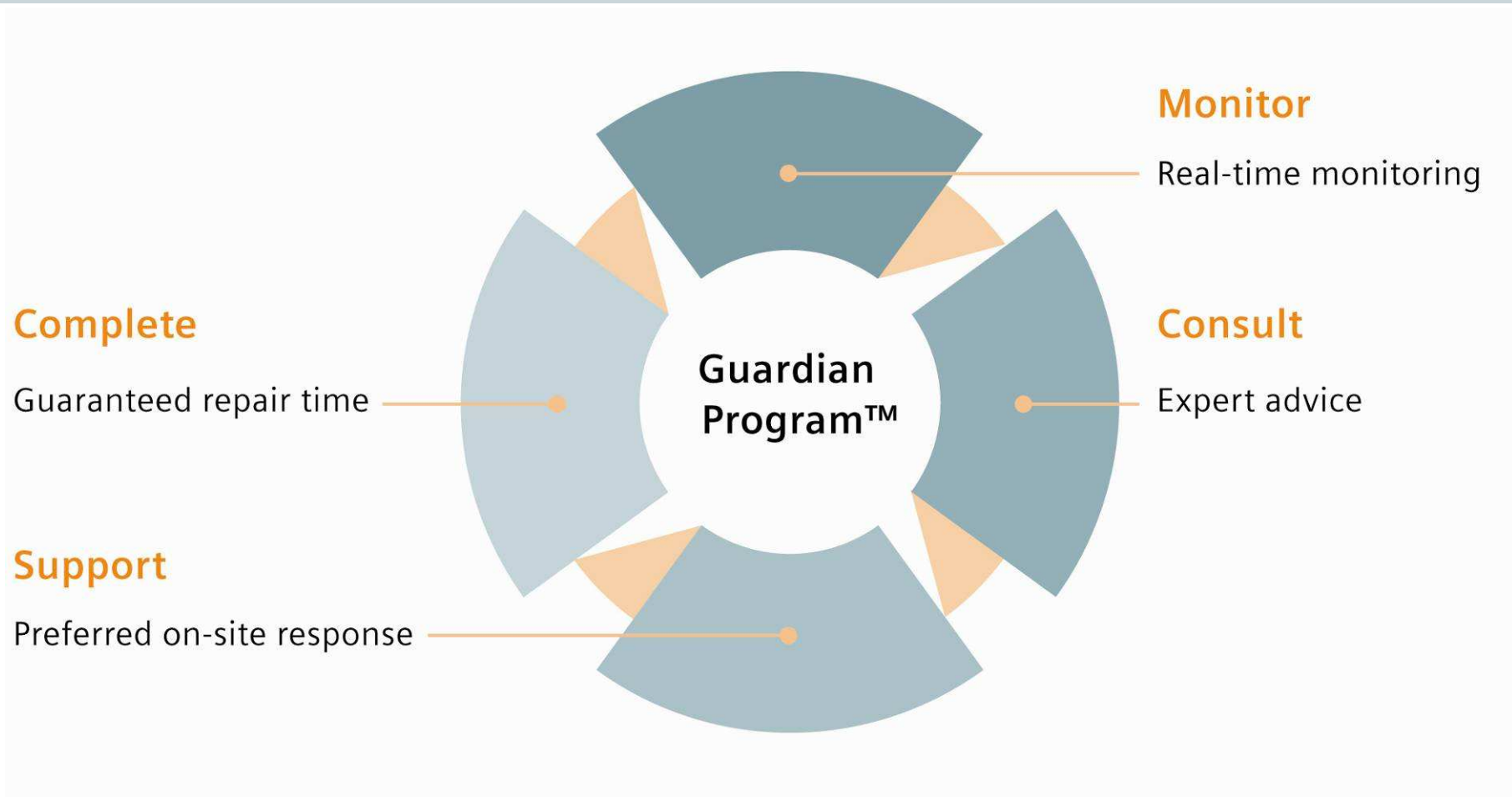
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Even the smallest **system malfunction**
can have severe consequences

Guardian Program™

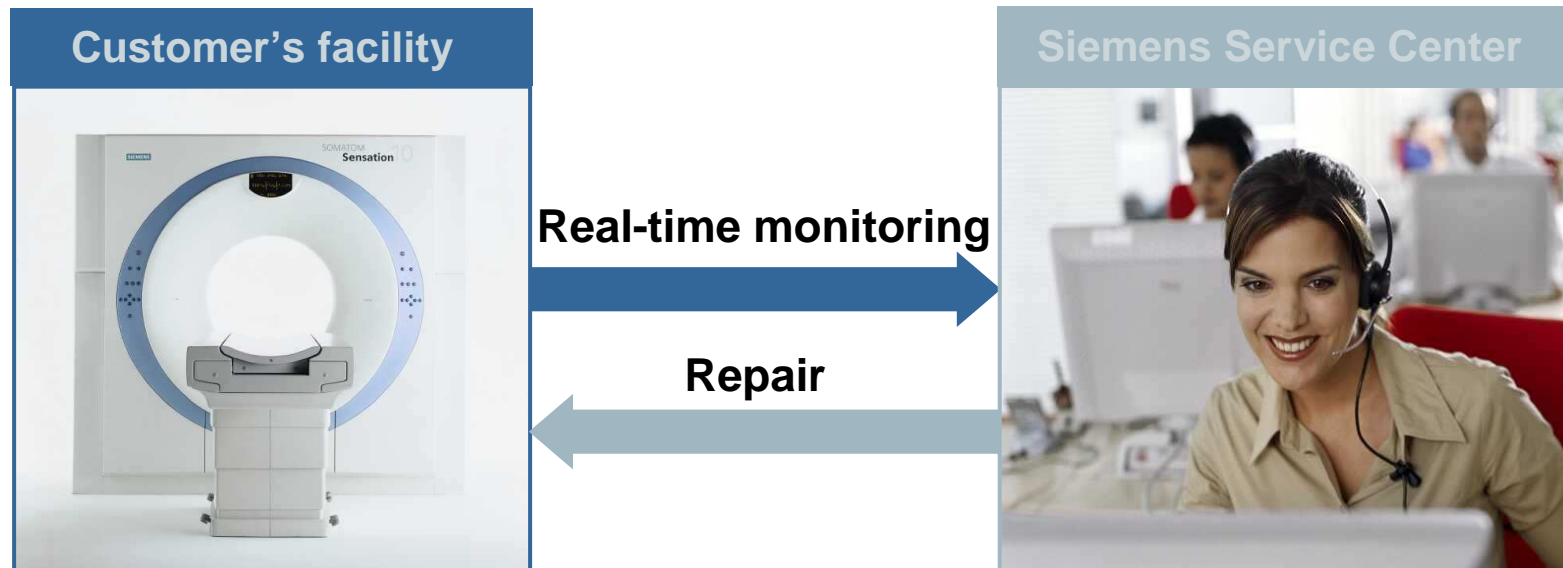
> powered by Siemens Remote Service



Guardian Program™

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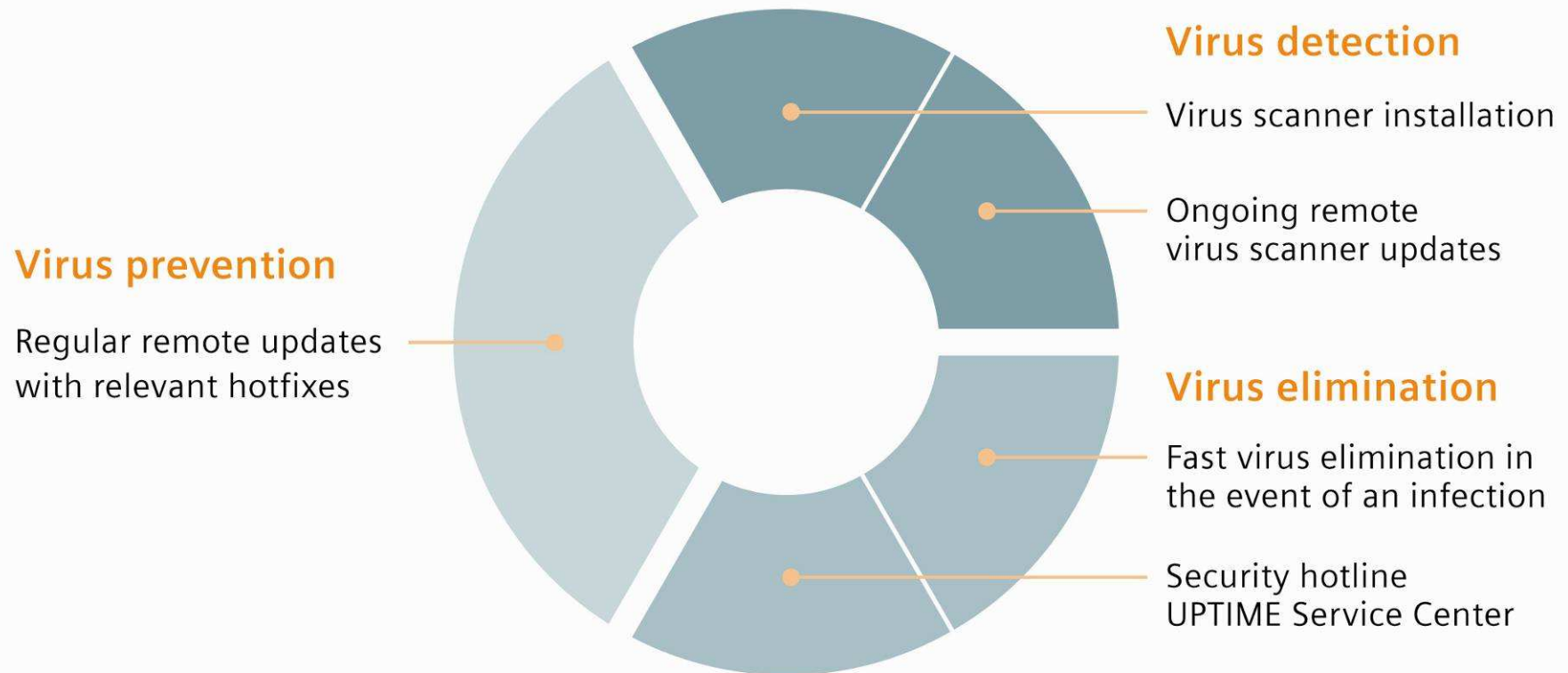
Key Benefits

- Real-time proactive remote monitoring
- Guaranteed repair time*
- High level of system availability possible

*Guarantee is subject to the terms and conditions of the service agreements
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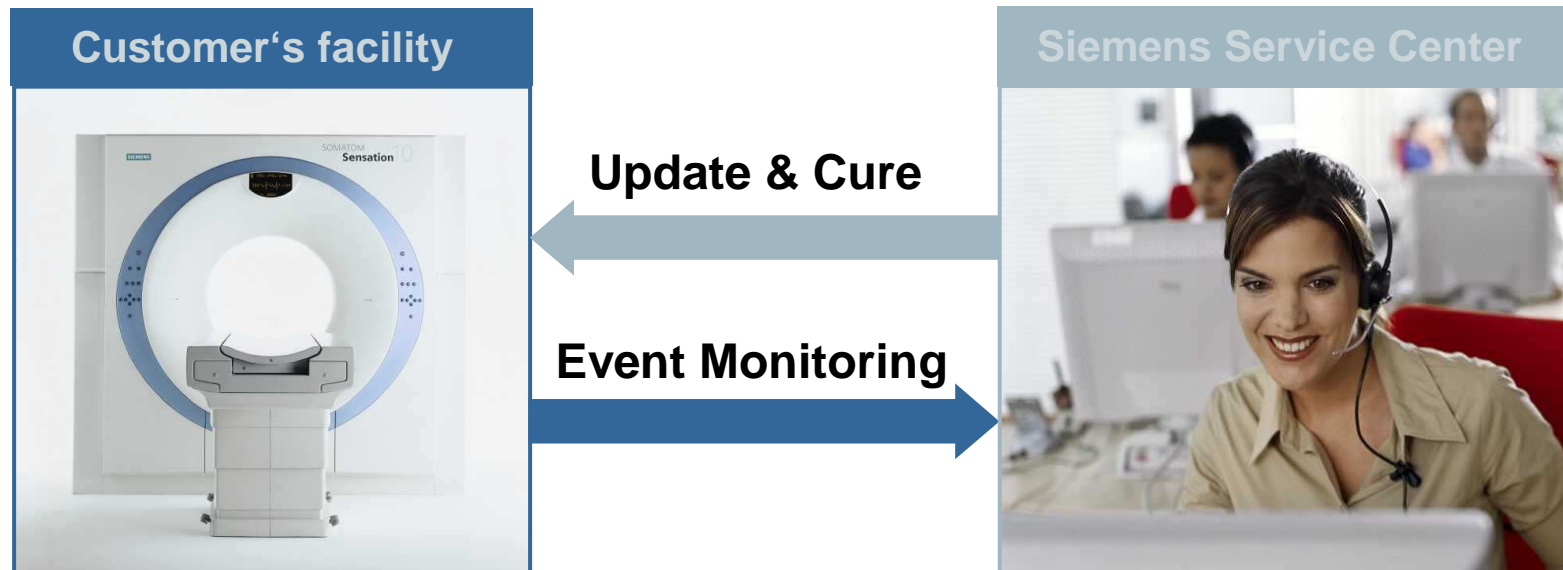
Siemens Virus Protection

> powered by Siemens Remote Service



Siemens Virus Protection

> powered by Siemens Remote Service



- Key Benefits**
- Excellent defense against malicious software attacks
 - Increased system reliability, availability and smoother clinical operations

Tools for Managing the Event Monitoring

Event Monitoring

Used modules and products:

- Proactive Event Management (HP Software based)
HP Open View Operations, version 8
- Software Distribution (HP Software based)
HP Open View Configuration Management, version 5
- Asset Management (HP Software based)
HP Open View Configuration Management, version 5

➔ strategic partnership with Hewlett Packard

Event Monitoring

... a case for **HP Operations Manager** with the administrative help of **blue elephant system's MIDAS**



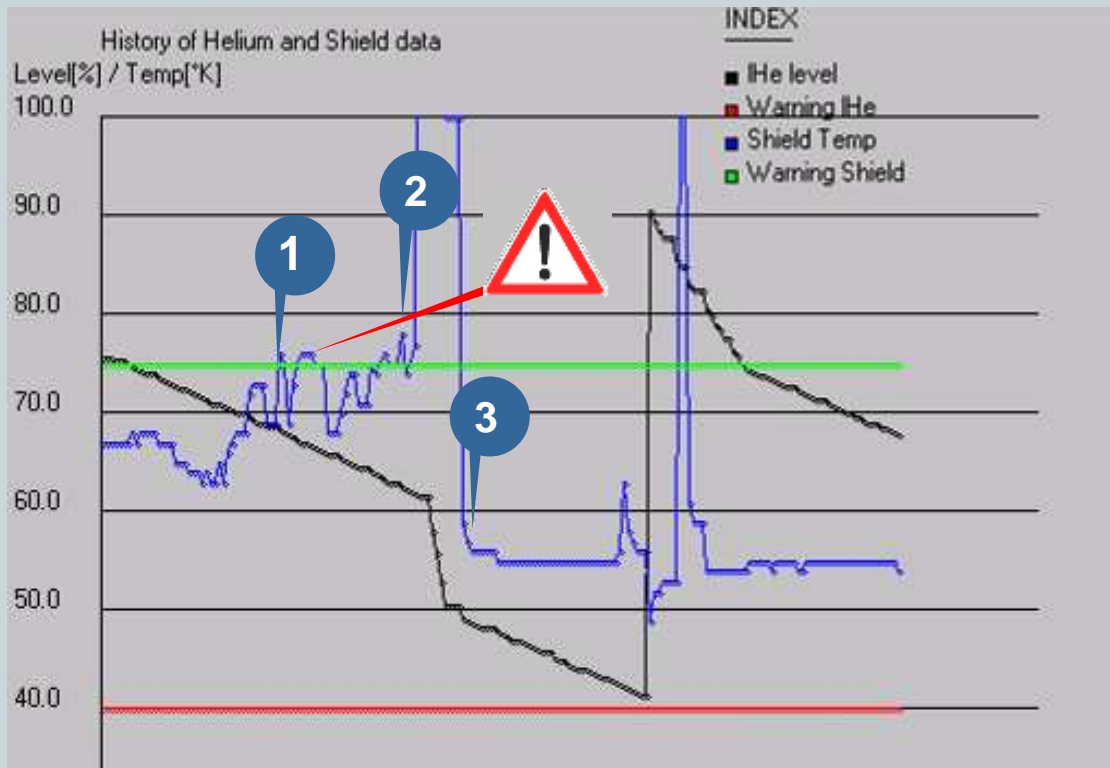
Event Monitoring

HP Operations Manager (HP OM) software @ SRS - Objectives

Operations Agent installed on all clinical devices for event monitoring:

- **HTTPS Operations Agent** software pre-installed on clinical devices
- New clinical devices automatically added to **Operations Manager for UNIX 8** when “going live” in hospital
- OS type, device type, hospital, etc. automatically identified by checking SIEMENS inventory as part of the “HTTPS agent certificate granting” process
- Device-specific policies automatically deployed
- Typical events to be monitored:
 - MR devices: Helium level and temperature (Helium as cooling liquid)
 - CT devices: Tube errors
 - HS Imaging devices: Database errors

Example: MR Cold head Monitoring



Cold head maintenance exactly when required

Shield temperature of MR system back to normal

Example: MR Cold head Monitoring



Result

- No disruption of patient examination and clinical workflow
- Increased efficiency through scheduled service
- Avoidance of cost through preventive change

Event Monitoring Graphical User Interface

The screenshot displays the HP OpenView Operations for UNIX graphical user interface. The main window is titled "HP OpenView Operations for UNIX [lux09330] [opc_admin]". It features a menu bar (File, Edit, View, Actions, Window, Help) and a toolbar with various icons. On the left, there is a "Nodes" pane showing a hierarchical tree structure. The tree is expanded to show the "Europe" region, which includes "Austria" and several sub-nodes like "Baden_Baden-Kh-Zri-DI", "Baden_Hayder-Werner-Dr", "Bludenz_Bludenz-Kh-Ct", etc. The selected node is "CT3815490-43392_CA".

The main area of the interface is titled "[CT3815490-43392_CA] Filtered Active Messages". It contains a table with the following columns: Severity, Dup., Time Last Rec..., and Node. The table shows one critical message:

Severity	Dup.	Time Last Rec...	Node
Critical	2	15:53:12 04/28/08	CT3815490-43392

Below the table is a "Message Dashboard" with a color-coded bar showing counts for different severity levels: 1 of 1 (red), 0 (orange), 0 (yellow), 0 (cyan), 0 (green), 0 (blue), and 0 (pink). Buttons for "Message Dashboard", "Diagnostic Dashboard", and "Corrective Actions" are visible.

At the bottom of the interface is a larger table with columns: Severity, Dup., Time Last Recei..., Node, Application, MsgGrp, Object, and Message Text. It lists several messages, including critical and warning messages from various applications like MR_ARISTOSFX-CR, AX_LUMINOS-DRF-FLC, CT_DEFINITION_YA11A, HS_OPMHA_VB30A, and XA_SENSIS-HEMO-M.

At the very bottom, there is a status bar showing "10110 of 727 194 8 195 517 0 0 8469" and a "Lock" button. A red button labeled "All Active Messages" is also present.

blue elephant system's MIDAS @ SRS - Objectives

MIDAS is the only option to keep track of the HP Operations Manager's dynamic environment with:

- 14000 Managed Nodes in Productive environment
- 2 Node Hierarchies
- appr. 500 Node Groups
- appr. 3500 Layout Groups
- appr. 500 Policy Groups with appr. 1000 Policies
- appr. 1000 Operators
- 1 x OM/U Test server
- 1 x OM/U Release server
- 3 x OM/U Production server

HP Operations Manager administration with MIDAS



Facts in the daily business:

- Increasing number of all OM/U elements (Nodes, Users, Node Groups, etc.)
- Shorter Release cycles
- New services
- Higher SLA's

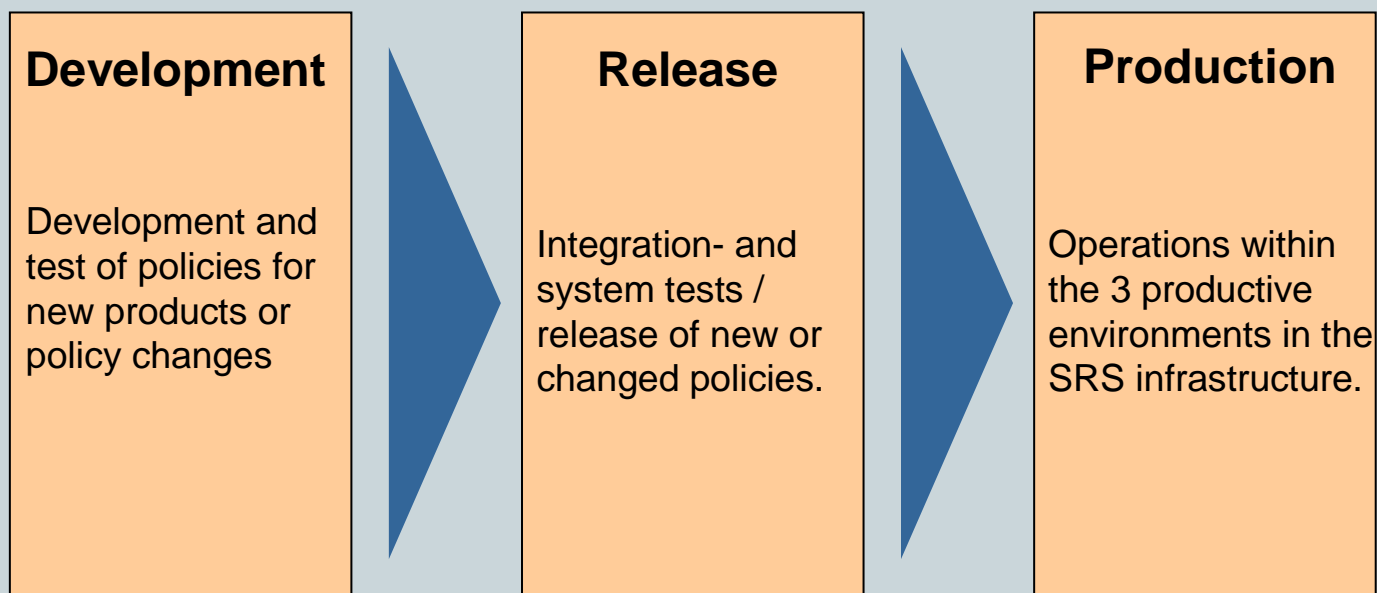
Requirements for the HP Operations Management administration:

- Quality assurance (3-level-development process with Development-, Release- and Productive Environment)
- Efficiency
- Automation
- Versioning
- Documentation

HP Operations Manager administration with MIDAS

Example – Policy development process with MIDAS

- “Living” the 3-level-development process
- Much more efficiency when editing and transferring policies
- Using MIDAS versioning
- Using MIDAS documentation feature



HP Operations Manager administration with MIDAS



Elements in Policy Group "P0_CT_P30-VA70C" - Microsoft Internet Explorer provided by CAT@Siemens

Adresse http://146.254.104.144:9662/midas/ovo/-BES-ovo-INC-/en/list_policy?context=ovo:policygroup&contextObjectId=P0_CT_P30-VA70C

Albes MIDAS Home OMU Server Admin Help User: admin Server: lux09330_server (OMU A.08.29)

Edit Browse Server Configuration Find Analyse Deployment Tasks Servers

Elements in Policy Group "P0_CT_P30-VA70C"

/ Policy Bank / P0_ALL / P0_CT / P0_CT_P30-VA70C

CT_P30-VA70C \$REVISION: 1.7 \$ - \$DATE: 2006/06/26 17:30:36 \$

Details P0_CT_P30-VA70C Filter

Found 4 Element(s)

Type	Name	Description
	P0_CT_P30-VA70C_Application-Logbook-Watch	Template for NT-Application Eventlog
	P0_CT_P30-VA70C_Check-ITO-messages	Check ITO messages (e.g. opcmgs) if further action is needed (e.g. escalation)
	P0_CT_P30-VA70C_Poll-Transfer-Files	Template for poll output files from logbook evaluation and/or escalation management
	P0_CT_P30-VA70C_version	CT_P30-VA70C \$Revision: 1.7 \$ - \$Date: 2006/06/26 17:30:36 \$

Choose an action

Local intranet

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Thank you for your attention!



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