FUJITSU Software ServerView Suite

Local Service Panels

Local Service Concept (LSC)

Last Edition February 2013
Comments… Suggestions… Corrections…

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Certified documentation according to DIN EN ISO 9001:2000

To ensure a consistently high quality standard and user-friendliness, this documentation was created to meet the regulations of a quality management system which complies with the requirements of the standard DIN EN ISO 9001:2000.

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1 Introduction

1.1 The Local Service Concept

The Local Service Concept (LSC) is part of the server management concept of Fujitsu Technology Solutions. The LSC functions allow you, as the system administrator, to monitor the server locally. You can receive messages about current operation and identify defective components of your server and, in the case of CSS components, also replace them yourself.

The Local Service Concept comprises the following components, which can work both together and independently of each other:

- The global error indicator
  The global error indicator is an LED which is always located on the front and with some models also on the back of the server. The global error LED indicates the status of the server.

- The ServerView Local Service Display
  This add-on module is an optional extra for many servers of the PRIMERGY series. With the high-end servers it is part of the basic configuration.
  
  The ServerView Local Service Display (just called Local Service Display in the following) allows you to read system status messages directly on the server. These status messages provide system information and warn you of hardware problems (e.g. fan failure) and critical temperatures. Components identified as defective may only be replaced by a service technician.

- The Customer Self Service concept
  The Customer Self Service concept (CSS concept) enables you to identify defective components of your server and replace them yourself.
1.2 Overview of the components

The following is an overview of the components available to you for monitoring your server locally.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global error indicator</td>
<td>The global error LED can be found on the front and on the back of the server. It shows the status of the server.</td>
</tr>
<tr>
<td>LED not lit:</td>
<td>No errors</td>
</tr>
<tr>
<td>LED lit:</td>
<td>Prefailure event detected</td>
</tr>
<tr>
<td>LED flashes:</td>
<td>Critical event has occurred</td>
</tr>
<tr>
<td>ID indicator</td>
<td>The ID LED can be found on the front and back of the server and helps you locate a server.</td>
</tr>
<tr>
<td>LED not lit:</td>
<td>Server not selected</td>
</tr>
<tr>
<td>LED lit:</td>
<td>Server is selected</td>
</tr>
<tr>
<td>CSS indicator</td>
<td>The CSS LED can be found on the front and back of the server. It helps you identify defective components on your server which you can replace yourself.</td>
</tr>
<tr>
<td>LED not lit:</td>
<td>No errors</td>
</tr>
<tr>
<td>LED lit:</td>
<td>Prefailure event detected</td>
</tr>
<tr>
<td>LED flashes:</td>
<td>Critical event has occurred</td>
</tr>
<tr>
<td>Local diagnostic indicators</td>
<td>The Local diagnostic LEDs can be found on the front of the server. There is one dedicated LED for each of the following component categories: HDD, PSU, TEMP, CPU, MEM, FAN.</td>
</tr>
<tr>
<td>LED not lit:</td>
<td>No errors</td>
</tr>
<tr>
<td>LED lit - orange on:</td>
<td>Failure detected</td>
</tr>
<tr>
<td>ServerView Operations Manager</td>
<td>ServerView Operations Manager is a server management software application with which you can activate the ID indicator or retrieve information about the CSS components of a managed server.</td>
</tr>
<tr>
<td>ServerView Local Service Display (LSD)</td>
<td>The Local Service Display is an add-on module on the front of your server, via which you can read the system status messages directly on the server.</td>
</tr>
</tbody>
</table>

Table 1: Overview of the components
1.3 Target group

This manual is intended for system administrators with a knowledge of servers from Fujitsu Technology Solutions.

1.4 Changes Since the Previous Version


This manual contains the following changes:

This manual has been updated to reflect the Local Service Concept (LSC) of the currently available PRIMERGY server models.

---

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ServerView Local Service Panel</td>
<td>The Local Service Panel is an optional module fitted to the front of the server. It lets you identify defective CSS components which can be replaced without opening the device.</td>
</tr>
</tbody>
</table>

Table 1: Overview of the components
1.5 Notational conventions

The following notational conventions are used in this manual:

<table>
<thead>
<tr>
<th>Notation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caution</strong></td>
<td>This symbol points out hazards that can lead to personal injury, loss of data or damage to equipment.</td>
</tr>
<tr>
<td><strong>i</strong></td>
<td>This symbol highlights important information and tips.</td>
</tr>
<tr>
<td>▶</td>
<td>This symbol refers to a step that you must carry out in order to continue with the procedure.</td>
</tr>
<tr>
<td><em>italics</em></td>
<td>Commands, menu items, names of buttons, options, variables, file names and path names are shown in <em>italics</em> in descriptive text.</td>
</tr>
<tr>
<td><strong>fixed font</strong></td>
<td>System outputs are indicated using a <strong>fixed font</strong>.</td>
</tr>
<tr>
<td><strong>semi-bold fixed font</strong></td>
<td>Commands to be entered via the keyboard are written in a semi-bold fixed font.</td>
</tr>
<tr>
<td><code>&lt;abc&gt;</code></td>
<td>Angle brackets are used to enclose variables which are to be replaced by actual values.</td>
</tr>
<tr>
<td><strong>Key symbols</strong></td>
<td>Keys are shown according to their representation on the keyboard. If uppercase letters are to be entered explicitly, then the Shift key is shown, e.g. <strong>SHIFT</strong> - <strong>A</strong> for A.</td>
</tr>
<tr>
<td></td>
<td>If two keys need to be pressed at the same time, this is shown by placing a hyphen between the two key symbols.</td>
</tr>
</tbody>
</table>

Table 2: Notational conventions

References to text or sections of text in this manual are shown with the chapter or section heading and the page on which that chapter or section begins.

**Screen outputs**

Please note that the screen output is dependent in part on the system used and therefore some details may not correspond exactly to the output you will see on your system. You may also see system-dependent differences in the menu items available.
1.6 Documentation for ServerView Suite

The documentation for the ServerView Suite can be found on the ServerView Suite DVD 2 supplied with each server system.

The documentation can also be downloaded free of charge from the Internet. You will find the online documentation at http://manuals.ts.fujitsu.com under the link Industry standard servers.

1.7 Safety precautions

CAUTION!

Make sure you observe the safety instructions in the chapter "Important information" in the server operating instructions.
Safety precautions
2 Controls and displays

The following two figures exemplarily show the controls and displays located on a PRIMERGY server’s front and rear panel. In the figures, the sections with the indicators are red marked.

![Front panel](image1)

**Figure 1: Front panel**

![Rear panel](image2)

**Figure 2: Rear panel**

The position and layout of the indicator on the front and/or on the back of the server may vary depending on the server model.
2.1 Global error indicator

The global error indicator (see following figure) is located on the front and, as a combined indicator, on the back of the server housing.

Figure 3: Global error indicator on the front panel

The LED has three possible states, which indicate the following:

<table>
<thead>
<tr>
<th>State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED not lit</td>
<td>Server is OK</td>
</tr>
<tr>
<td>LED lit</td>
<td>Prefailure event detected (warning)</td>
</tr>
<tr>
<td>LED flashes</td>
<td>Critical event has occurred (not in standby mode)</td>
</tr>
</tbody>
</table>

To establish the type and cause of an error, you need at least one of the following components:

- ServerView Operations Manager
- ServerView Local Service Display (see chapter "ServerView Local Service Display" on page 21)
- ServerView Local Service Panel (see section "ServerView Local Service Panel" on page 37)
The global error indicator is also located on the back of the server (see figure 4).

Figure 4: Global error indicator on the rear panel

This LED is used as a combined CSS/global-error/ID indicator. For a detailed description of these indicators, see section "Indicators on the back (CSS/global error/ID LED)" on page 19.

The position and layout of the indicator on the back of the server may vary depending on the server model.
2.2 **CSS indicator**

The CSS LED and the local diagnostic LEDs help you identify defective components on your server which you may replace yourself. The CSS LED and the local diagnostic LEDs are located on the front panel (see figure below). There is one dedicated local diagnostic LED for each of the following component categories: HDD, PSU, TEMP, CPU, MEM, FAN. Additionally, a CSS LED, as a combined indicator, is located on the back of the server housing. For a detailed description of the CSS indicator on the front and the CSS component indicators, see chapter "Customer Self Service concept" on page 33. The CSS indicator on the back is described in the general section "Indicators on the back (CSS/global error/ID LED)" on page 19.

![CSS indicator on the front panel](image)

**Figure 5: CSS indicator on the front panel**

![CSS indicator on the rear panel](image)

**Figure 6: CSS indicator on the rear panel**
CSS indicator

This LED is used as a combined CSS/global-error/ID indicator. For a detailed description of these indicators, see section "Indicators on the back (CSS/global error/ID LED)" on page 19.

The position and layout of the indicators on the front/back of the server may vary depending on the server model.
2.3 ID indicator

2.3.1 Locating a server manually

The identification indicator (ID LED) allows you to locate a particular server in the server room. This is especially helpful if a large number of externally identical servers are housed in a restricted space (e.g. in a rack).

The ID indicator is a button labelled ID on the front of the server with a blue LED above it (see figure 7).

![Figure 7: ID indicator on the front panel](image)

By pressing the ID button on the front of the server you can manually activate or deactivate the ID indicator.

To manually activate the ID indicator:

- Press the ID button.
  The blue LED is now lit continuously.

To manually deactivate the ID indicator:

- Press the ID button again.
  The blue LED goes out.
There is another ID indicator on the back of the server (see figure 8).

Figure 8: ID indicator on the rear panel

This indicator is used as a combined CSS/global error/ID indicator. If the ID LED on the front of the server is lit, the ID LED on the back will also be lit. As soon as another event occurs for the global error or CSS indicator, the LEDs flash alternately in the corresponding colors. For a detailed description of this indicator, see section "Indicators on the back (CSS/global error/ID LED)" on page 19.

The position and layout of the indicator on the back of the server may vary depending on the server model.
2.3.2 Locating a server via ServerView

For the ID indicator to be used via the user interface, the following programs must be installed:

- ServerView Operations Manager
- ServerView agents.

You can activate or deactivate the ID indicator via the Locate button in ServerView Operations Manager.

To activate the ID indicator in ServerView Operations Manager:

- Click the Locate button.
  The blue LED is now lit continuously.

To deactivate the ID indicator in ServerView Operations Manager:

- Click the Locate button again.
  The blue LED goes out.
2.4 Indicators on the back (CSS/global error/ID LED)

On the back of the server is an LED which is used simultaneously as the following:

- Global error indicator (orange)
  Only with servers that also support the global error indicator on the back of the server.

- CSS indicator (yellow)
  Only with servers that support the CSS function.

- ID indicator (blue)

Figure 10: CSS/global error/ID LED on the back
The LED has three possible states, which indicate the following:

<table>
<thead>
<tr>
<th>State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED not lit</td>
<td>Server is OK or Server not selected (ID indicator)</td>
</tr>
<tr>
<td>LED lit</td>
<td>Prefailure event detected (warning) or Server selected (ID indicator)</td>
</tr>
<tr>
<td>LED flashes</td>
<td>Critical event has occurred (not in standby mode)</td>
</tr>
</tbody>
</table>

Depending on the colors and whether they are flashing or just lit, the LEDs indicate the following statuses:

<table>
<thead>
<tr>
<th>State</th>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS LED lit</td>
<td>yellow</td>
<td>Prefailure event for a CSS component has been detected</td>
</tr>
<tr>
<td>CSS LED flashes</td>
<td>yellow</td>
<td>Defective CSS component has been detected</td>
</tr>
<tr>
<td>Global error LED lit</td>
<td>orange</td>
<td>Prefailure event for a non-CSS component has been detected</td>
</tr>
<tr>
<td>Global error LED flashes</td>
<td>orange</td>
<td>Error requiring a service technician has been detected</td>
</tr>
<tr>
<td>CSS/global error/ID LED lit</td>
<td>yellow/orange/blue</td>
<td>If the CSS LED is lit/flashing and at the same time an error requiring a service technician occurs and the ID indicator has been activated, the LED is lit/flashes alternately in the corresponding colors.</td>
</tr>
<tr>
<td>ID LED lit</td>
<td>blue</td>
<td>The system was selected by pressing the ID button or clicking the Locate button. Pressing the ID button or clicking the Locate button again deactivates the indicator.</td>
</tr>
</tbody>
</table>
3 ServerView Local Service Display

The Local Service Display (LSD) allows you to read system status messages directly on the server.

The status messages on the Local Service Display provide information about the system and warn you of hardware problems (e.g. fan failure) or critical temperatures.

Because of system-specific variations, with some servers, the status messages are not shown on the Local Service Display but on a special control panel.

3.1 Organization of the messages

The messages on the Local Service Display are arranged in pages:

- Self-test page
- Main page
- System information page
- User information page
- Error messages (error log)
Organization of the messages

Self-test page
When the server is switched on, the Local Service Display shows the POST (Power-On Self-Test) code for the individual BIOS test phases. If a test fails, the display stops at the current POST code.

Main page
As soon as the BIOS self-test is complete, the ServerView Local Service Display switches to the main page.

This shows the manufacturer name or the first two system information entries if you have configured the system information page. For details see section "System information" on page 27.

System information page and user information page
The system information and user information pages show messages which you have previously configured. For details see sections "System information" on page 27 and "User information" on page 28.

Error log page
If a system error occurs, the ServerView Local Service Display automatically switches to the error log page and shows the message for this system error. For details see section "System errors (error log)" on page 28.
Organization of the messages

Page sequence

The following figure shows the sequence of the pages on the Local Service Display:

The system information page and user information page can only be selected if they have been configured in the ServerView Configuration Manager beforehand.

Under Windows you can also configure the system information page in ServerView Installation Manager before you install ServerView Operations Manager.
3.2 Operation

Local Service Display screen

The screen of the Local Service Display consists of two lines of 20 characters each. It has yellow/green backlighting, a wide viewing angle and a high contrast range.

To read the information, you can pull the Local Service Display out of the computer housing via a drawer mechanism. Press on the front of the module to release the lock mechanism.

You can also swivel the Local Service Display down 120 degrees from its normal position. This makes it easier to read the display if the server is mounted very high up in a rack.
**Toggle switch**

You can use the toggle switch to select the pages:

The toggle switch allows you to scroll through the page contents in order to read the messages:

- ^ Scroll forward through the messages
- v Scroll back through the messages

The switch also allows you to scroll to the different pages (the sequence of the pages is shown in the diagram on page 23):

- > Scroll to next page
- < Scroll to previous page

The figure above shows a typical alarm message.
3.3 Main page

When the server is switched on, the system automatically carries out the BIOS self-test. As soon as this is completed, the main page is displayed on the ServerView Local Service Display.

The main page shows either the manufacturer's name or the first two entries from the system information page.

The first two entries from the system information page can only be shown if the system information page was configured beforehand via the ServerView Configuration Manager. For details see section "Configuring system information" on page 31.
3.4 System information

The administrator can define which information is to be displayed on this page.

Examples of system information:
- System Name
- IP Address
- Cabinet Model
- System Serial Number
- Operating System

The list of the information to be displayed is configured via the ServerView Configuration Manager in ServerView Operations Manager (see section "Configuring system information" on page 31).
Alternatively, under Windows the Configuration Manager can also be run via the Windows start menu (Start – [All ]Programs – Fujitsu ServerView Suite – Agents – System Configuration).

Under Windows you can also configure the system information page in ServerView Installation Manager before ServerView Operations Manager is installed.

Reading system information

The messages appear directly on the Local Service Display. They are cleared when a new message is output.

You can scroll through the configured system information with the ^ and v toggle-switch functions.
3.5 User information

On the user information page you can store personal information which can be shown on the display.

This function is generally used to store information such as the system administrator’s name, phone number, room number or other useful information.

The entries are configured via the ServerView Configuration Manager (see section "Configuring user information" on page 30).

3.6 System errors (error log)

If system errors occur during normal operation, the system display automatically switches to system error mode:

Structure of an error message

– An error message always consists of two lines.
– The first line contains the message itself.
– The second line contains the date and time in the format:

  day.month.year hours:minutes:seconds
  (e.g. 22.02.09 11:39:05)
You can view the recorded error log by using the toggle switch to change from system information mode to system error mode and then scrolling backward and forward through the error messages.

Up to 50 error messages can be stored.

You can find out more details of the type and extent of the error which occurred via ServerView Operations Manager.

### 3.7 Configuration

For Windows and Linux you configure the system information and user information pages via the ServerView Configuration Manager.

You can call up the Configuration Manager while you are configuring the system with ServerView Operations Manager. You can also use the Configuration Manager during normal operation – via the ServerView Suite DVD 1. Under Windows you can also call up the Configuration Manager via the start menu (Start – [All Programs – Fujitsu ServerView Suite – Agents – System Configuration).

Under Windows you can also configure the system information page in ServerView Installation Manager before ServerView Operations Manager is installed.
3.7.1 Configuring user information

In the Configuration Manager you can define user-specific values which are then displayed on the user information page. These include, for example, the system administrator’s name, phone number, a room number or other useful information.

Enter the information you want in the fields on the tab shown below.

If you are using Novell NetWare, the name of the responsible system administrator and similar information are displayed here.
3.7.2 Configuring system information

To configure the system information you want to be shown on the Local Service Display, proceed as follows:

- Highlight the entry you want in the list of available system values (list (1) in the figure above).
- Click the Add button to add the selected system information to the output (list (2) in the figure above).

Not all the system information entries can be displayed. The computer may only have one IP address and therefore additional IP addresses will not be displayed. All entries with information in the Current Value column can be displayed.

- If you want to delete an entry from the output list, mark it and then click the Remove button.
- To change the order of the entries in the output list, click the Move Up or Move Down buttons.
- To save the current configuration, click the Save Page button.
Customer Self Service concept

The Customer Self Service (CSS) concept is part of the Local Service Concept of Fujitsu Technology Solutions. The CSS concept enables you to identify defective components of your server and replace them yourself. These so-called CSS components are:

- Hot-plug hard disk drives
- Hot-plug power supply units
- Main memory
- System fan
- Expansion boards

The CSS concept includes the following indicators:

- CSS indicator to identify the CSS function on the front and back of the server.
- Local diagnostic indicators on the front of the server to identify the defective CSS component.
- CSS-component LED to identify the defective CSS component on the system board.
- Optional: ServerView Local Service Panel (just called Local Service Panel in the following) to identify the defective CSS component without opening the server.

The Local Service Panel contains additional LEDs for indicating defective components, but these components may only be replaced by a service technician.

Supported servers

The CSS function is supported by all currently available PRIMERGY servers.
4.1 CSS indicator on the front/back

The CSS LED and the local diagnostic LEDs help you identify defective components on your server which you may replace yourself. The CSS LED and the local diagnostic LEDs are located on the front panel (see figure below). There is one dedicated local diagnostic LED for each of the following component categories: HDD, PSU, TEMP, CPU, MEM, FAN. Additionally, a CSS LED, as a combined indicator, is located on the back of the server housing.

Figure 11: CSS LED and CSS indicators on the front panel

The position and layout of the indicators on the front of the server may vary depending on the server model.

The CSS LED has three possible states, which indicate the following:

<table>
<thead>
<tr>
<th>State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED not lit</td>
<td>Server is OK</td>
</tr>
<tr>
<td>LED lit</td>
<td>Prefailure event detected (warning)</td>
</tr>
<tr>
<td>LED flashes</td>
<td>Critical event has occurred (not in standby mode)</td>
</tr>
</tbody>
</table>

Each local diagnostic LED can have the status "LED not lit" or "LED orange on". Depending on the related component category, the "LED orange on" status indicates the following:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 HDD / SSD</td>
<td>orange on</td>
<td>HDD / SSD, SAS / SATA backplane or RAID controller failure detected</td>
</tr>
<tr>
<td>error indicator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 PSU error</td>
<td>orange on</td>
<td>Hot-plug PSU module failure detected</td>
</tr>
<tr>
<td>indicator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Only available in redundant PSU configurations.
There is another CSS indicator on the back of the server.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature error indicator</td>
<td>orange on</td>
<td>Operating temperature levels above permitted limits</td>
</tr>
<tr>
<td>Fan error indicator</td>
<td>orange on</td>
<td>Fan prefailure or failure event detected</td>
</tr>
<tr>
<td>Memory error indicator</td>
<td>orange on</td>
<td>Memory module failure detected</td>
</tr>
<tr>
<td>CPU error indicator</td>
<td>orange on</td>
<td>CPU prefailure event detected</td>
</tr>
</tbody>
</table>

This indicator is used as a combined CSS/global error/ID indicator. For a detailed description of this indicator, see section "Indicators on the back (CSS/global error/ID LED)" on page 19.

The position and layout of the indicator on the back of the server may vary depending on the server model.
Identification of the defective component

4.2 Identification of the defective component (CSS component)

To identify a defective component on the system board, there is a CSS-component LED next to each CSS component. If you press the Indicate CSS pushbutton, the defective component lights up when there is no power (power plug disconnected).

![Figure 13: Indicate CSS pushbutton](image)

- The position of the Indicate CSS pushbutton can vary depending on the system board.
4.3 ServerView Local Service Panel

If your server is fitted with a Local Service Panel (LSP), you can use this module to determine which component is defective and whether you can replace the component yourself.

Figure 14: ServerView Local Service Panel

Because of system-specific variations, with some servers the status messages are not shown on the Local Service Display but on a special control panel.

Requirement
Before defective hard disk drives can be displayed on the Local Service Panel, the ServerView agent and ServerView RAID Manager must be installed on the server. Otherwise, the error will only be displayed on the hard disk drive itself (orange LED).
4.3.1 Operation

To allow you to read information from the Local Service Panel, you can pull the Local Service Panel out of the computer housing via a drawer mechanism.

You can also swivel the Local Service Panel through an angle of 120 degrees from its normal position. This makes reading easier if the server is mounted very high up in the rack.
4.3.2 Indicator panel

The Local Service Panel contains LEDs for precise identification of the defective CSS component. If the CSS LED is lit (yellow), you may replace only the corresponding CSS component yourself, see below. Defective CSS components should be replaced immediately.

The Local Service Panel also contains LEDs for non-CSS components. If these LEDs light up, the corresponding components may only be replaced by a service technician.

![ServerView Local Service Panel - indicator panel](image)

Figure 16: ServerView Local Service Panel - indicator panel

Please note:

Non-CSS components may only be replaced by a service technician!

The CSS LED has two possible states, which indicate the following:

<table>
<thead>
<tr>
<th>CSS LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not lit</td>
<td>CSS function off</td>
</tr>
<tr>
<td>Lit</td>
<td>Defective component has been detected</td>
</tr>
</tbody>
</table>
ServerView Local Service Panel

The following list shows the CSS components that you may replace yourself. If one of these is defective, the corresponding CSS-component LED lights up.

<table>
<thead>
<tr>
<th>CSS-component LED</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI</td>
<td>Expansion boards</td>
</tr>
<tr>
<td>FAN</td>
<td>System fan</td>
</tr>
<tr>
<td>MEM</td>
<td>Main memory</td>
</tr>
<tr>
<td>HDD</td>
<td>Hot-plug hard disk drives</td>
</tr>
<tr>
<td>PSU</td>
<td>Hot-plug power supply units</td>
</tr>
</tbody>
</table>

**Inner Maintenance / Outer Maintenance**

Indicates the components that can be replaced without opening the housing (*Outer Maintenance*) or which require opening the housing (*Inner Maintenance*).

**Replacing the components**

The procedure for replacing the main memory, the system fans and the expansion boards is described in the Options Guide for the relevant server.

The procedure for replacing hot-plug components is described in the operating manual for the relevant server.

These descriptions are included on the ServerView Suite DVD 2.
### 4.4 Display in the Local Service Display

If your server is fitted with a Local Service Display, a corresponding message will be displayed when a defective CSS component is detected:

![ServerView Local Service Display](image)

Figure 17: ServerView Local Service Display
4.5 Display in ServerView

With ServerView version 4.52 and higher, you can also use the CSS function via the server management software ServerView Operations Manager.

This requires that the ServerView agents for Windows/Linux version V4.52 and higher are installed on the managed server.

In ServerView Operations Manager the Customer Self Service menu provides an overview of the CSS components of a managed server. On the more recent PRIMERGY servers, a link after the entries in the table takes you directly to the relevant Illustrated Spares Catalogue, via which you can order a replacement for the defective CSS component. If no relevant page is found for the server, the overview page for the Illustrated Spares Catalogues is displayed.

Figure 18: Customer Self Service in ServerView Operations Manager
4.6 Display in iRMC S2/S3

The overview tables for the server components on the System Information page and the Sensors page in Remote Management via iRMC S2/S3 indicate in a separate column whether the component in question is a CSS component.

The System Event Log Content page in the Event table indicates whether each event is a CSS event.

![Event display in iRMC S2/S3](image)

Figure 19: Event display in iRMC S2/S3
Display in iRMC S2