Contacting BMC Software

You can access the BMC Software website at http://www.bmc.com. From this website, you can obtain information about the company, its products, corporate offices, special events, and career opportunities.

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2101 CITYWEST BLVD
HOUSTON TX 77042-2827
USA

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Fax: 713 918 8000

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You can obtain technical support by using the BMC Software Customer Support website or by contacting Customer Support by telephone or e-mail. To expedite your inquiry, see “Before contacting BMC.”

Support website

You can obtain technical support from BMC 24 hours a day, 7 days a week at http://www.bmc.com/support_home. From this website, you can

- read overviews about support services and programs that BMC offers
- find the most current information about BMC products
- search a database for issues similar to yours and possible solutions
- order or download product documentation
- download products and maintenance
- report an issue or ask a question
- subscribe to receive proactive e-mail alerts when new product notices are released
- find worldwide BMC support center locations and contact information, including e-mail addresses, fax numbers, and telephone numbers

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In the United States and Canada, if you need technical support and do not have access to the web, call 800 537 1813 or send an e-mail message to customer_support@bmc.com. (In the subject line, enter SupID:<yourSupportContractID>, such as SupID:12345). Outside the United States and Canada, contact your local support center for assistance.

Before contacting BMC

Have the following information available so that Customer Support can begin working on your issue immediately:

- product information
  - product name
  - product version (release number)
  - license number and password (trial or permanent)
- operating system and environment information
  - machine type
  - operating system type, version, and service pack or other maintenance level such as PUT or PTF
  - system hardware configuration
  - serial numbers
  - related software (database, application, and communication) including type, version, and service pack or maintenance level
- sequence of events leading to the issue
- commands and options that you used
- messages received (and the time and date that you received them)
  - product error messages
  - messages from the operating system, such as file system full
  - messages from related software
License key and password information

If you have questions about your license key or password, contact BMC as follows:

- **(USA or Canada)** Contact the Order Services Password Team at 800 841 2031, or send an e-mail message to ContractsPasswordAdministration@bmc.com.

- **(Europe, the Middle East, and Africa)** Fax your questions to EMEA Contracts Administration at +31 20 354 8702, or send an e-mail message to password@bmc.com.

- **(Asia-Pacific)** Contact your BMC sales representative or your local BMC office.
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About this book

This book includes information about the structure and contents of the distribution tapes for BMC Capacity Management for Mainframes, which is sold and licensed as a complete BMC Software solution or is available as the following separate products:

- BMC Performance Predictor for Mainframes
- BMC Performance Analyzer for Mainframes
- BMC Performance Analyzer for Mainframe Applications
- BMC Performance Perceiver for Mainframes

This book contains detailed information about how to install the following products and components of BMC Capacity Management for Mainframes:

- Universal Information Exchange (UIE)
- Universal Information Exchange/VM (UIE/VM)
- Universal Information Exchange/PC (UIE/PC)

Like most BMC documentation, this book is available in printed and online formats. To request additional printed books or to view online books and notices (such as release notes and technical bulletins), see the Customer Support website at http://www.bmc.com/support_home. Some product shipments also include the online books on a documentation CD.

**NOTE**

Online books are formatted as PDF or HTML files. To view, print, or copy PDF books, use the free Adobe Reader from Adobe Systems. If your product installation does not install the reader, you can obtain the reader at http://www.adobe.com.

The software also offers online Help. To access Help, press F1 within any product or click the Help button in graphical user interfaces (GUIs).

**NOTE**

This book assumes that you are familiar with your host operating system. You should know how to perform basic actions in a window environment, such as choosing menu commands and dragging and dropping icons.
## Related publications

The following related publications supplement this book and the online Help:

<table>
<thead>
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<th>Category</th>
<th>Document</th>
<th>Description</th>
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<tr>
<td>installation documents</td>
<td><strong>for Product Solution/Family® Installation Guide</strong></td>
<td>describes product-specific installation information for UIE, UIE/PC, and UIE/VM and explains how to configure and connect UIE and BMC Performance Predictor for Mainframes. This book also includes tailoring issues as well as system requirements and installation tape contents.</td>
</tr>
<tr>
<td></td>
<td><strong>BMC Performance Predictor for Mainframes Getting Started</strong></td>
<td>provides instructions for installing BMC Performance Predictor for Mainframes software on a windows system and configuring an associated web server for report viewing and includes steps for getting started with the Mainframe Predictor console and associated tools.</td>
</tr>
<tr>
<td></td>
<td><strong>Capacity Management Database Getting Started</strong></td>
<td>provides instructions for installing, configuring, and getting started with BMC CDB Services and BMC CDB Workflow Service on a Windows system.</td>
</tr>
<tr>
<td>core documents</td>
<td><strong>Universal Information Exchange User Guide</strong></td>
<td>describes how to set up the IBM® z/OS® job to process and package the baseline models that are sent to the BMC Performance Predictor for Mainframes processes for viewing and modification and also explains how UIE produces a Visualizer file that can be used to view Visualizer graphs.</td>
</tr>
<tr>
<td></td>
<td><strong>BMC Performance Predictor for Mainframes User Guide</strong></td>
<td>describes how to perform user tasks, such as creating scenarios, graphs, and reports by using the BMC Performance Predictor for Mainframes and also explains how to interact with the Mainframe Predictor Portal.</td>
</tr>
<tr>
<td></td>
<td><strong>Capacity Management Database User Guide</strong></td>
<td>describes the configuration tool and how to submit requests for services.</td>
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</table>
Conventions

This book uses the following special conventions:

- All syntax, operating system terms, and literal examples are presented in this typeface.

- Variable text in path names, system messages, or syntax is displayed in *italic* text:

  `testsys/instance/file_name`

- The symbol `=>` connects items in a menu sequence. For example, `Actions => Create Test` instructs you to choose the `Create Test` command from the `Actions` menu.

Syntax statements

The following example shows a sample syntax statement:

```
COMMAND KEYWORD1 [KEYWORD2 | KEYWORD3] KEYWORD4={YES | NO} fileName...
```
The following table explains conventions for syntax statements and provides examples:

<table>
<thead>
<tr>
<th>Item</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items in italic type represent variables that you must replace with</td>
<td><em>alias</em></td>
</tr>
<tr>
<td>a name or value. If a variable is represented by two or more</td>
<td><em>databaseDirectory</em></td>
</tr>
<tr>
<td>words, initial capitals distinguish the second and subsequent words.</td>
<td><em>serverHostName</em></td>
</tr>
<tr>
<td>Brackets indicate a group of optional items. Do not type the</td>
<td><em>[tableName, columnName, field]</em></td>
</tr>
<tr>
<td>brackets when you enter the option. A comma means that you can</td>
<td><em>(full), (incremental), (level)</em></td>
</tr>
<tr>
<td>choose one or more of the listed options. You must use a comma to</td>
<td><em>(UNIX)</em></td>
</tr>
<tr>
<td>separate the options if you choose more than one option.</td>
<td></td>
</tr>
<tr>
<td>Braces indicate that at least one of the enclosed items is required.</td>
<td>*{DBDName</td>
</tr>
<tr>
<td>Do not type the braces when you enter the item.</td>
<td>*UNLOAD device={disk</td>
</tr>
<tr>
<td>*fileName</td>
<td>deviceName}*</td>
</tr>
<tr>
<td>{.a</td>
<td>.c} <em>(UNIX)</em></td>
</tr>
<tr>
<td>A vertical bar means that you can choose only one of the listed</td>
<td>*commit</td>
</tr>
<tr>
<td>items. In the example, you would choose either commit or cancel.</td>
<td>*(commit</td>
</tr>
<tr>
<td>An ellipsis indicates that you can repeat the previous item or</td>
<td><em>columnName . . .</em></td>
</tr>
<tr>
<td>items as many times as necessary.</td>
<td></td>
</tr>
</tbody>
</table>
Overview of the installation process

This chapter provides a general description of the process for installing the BMC Capacity Management for Mainframes products.

The installation process

1. Review the requirements for installing and running your products, as described in Chapter 2, “System requirements for product installation.”

2. Decide how you want to obtain the product files, as described in Chapter 3, “Choosing a distribution method”
   - electronically, from the BMC Electronic Product Distribution (EPD) facility
   - from a z/OS installation tape

3. Use the Online Installation Facility, as described in Chapter 4, “Installing products with the Online Installation Facility”
   - Specify data set names and other parameters that conform to the requirements of the customer site.
   - If necessary, create a new, or update an existing Product Control File. This file is required to unload the distribution tape or to run any product, as specified in the licensing agreement.
   - Identify Runtime Libraries.
   - Create and submit the UNLOAD job, which unloads the products from the distribution tape.
The files are unloaded from the distribution tape and the execution JCL and CLISTs for the installed products are automatically tailored so that they can be successfully executed.

4 Choose a product invocation method, as described in Chapter 5, “Choosing an invocation method”

- customize a LOGON PROC, if needed
- customize the ISR@PRIM panel, if needed

5 Run the installed products.

Because many BMC product JCL streams change from release to release, you should regenerate product jobs with the current release. Do not use JCL that was generated by a previous release.
System requirements for product installation

This chapter presents the software, disk space, and memory requirements for installing BMC Capacity Management for Mainframes products.

Software requirements

Table 1 on page 18 shows the software that is required and optional for installing BMC Capacity Management for Mainframes products. For example, R in the box corresponding to the UIE product and ISPF V. 2.3 indicates that UIE requires ISPF 2.3.0 or later.

In Table 1 on page 18, R indicates Required; O indicates Optional.
### Disk space requirements

Approximately 4500 tracks of 3390 disk space are required to install BMC Capacity Management for Mainframes on a z/OS system. Approximately 450 tracks of 3390 disk space are required to install UIE/VM on an IBM z/VM® system.

### Memory requirements

**Table 1  Software requirements for BMC Capacity Management for Mainframes**

<table>
<thead>
<tr>
<th>Product versions minimum release requirements</th>
<th>Install</th>
<th>UIE</th>
<th>UIE/VM</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM® ISPF 2.3</td>
<td>R</td>
<td>R&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>IBM ISPF 3.2</td>
<td>O</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>IBM Language Environment (LE) 1.8</td>
<td>R&lt;sup&gt;b&lt;/sup&gt;</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>IBM SMF/RMF 3.3</td>
<td>R&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> ISPF is required only if you want to run UIE by using the interactive, full-screen interface.

<sup>b</sup> The LE library is also required by the UNLOAD job that is part of the z/OS Online Installation Facility.

<sup>c</sup> The capture components of UIE are compatible with SMF/RMF release 3.3 and later. The Goal Mode option is also supported.

**Table 2  Memory requirements for BMC Capacity Management for Mainframes**

<table>
<thead>
<tr>
<th>Product</th>
<th>Product version</th>
<th>Region size</th>
</tr>
</thead>
<tbody>
<tr>
<td>UIE</td>
<td>N/A</td>
<td>128 MB</td>
</tr>
</tbody>
</table>

**Note:** This value is a minimum recommended value. Your requirements will depend on the size of your model.
The following tables include a matrix of supported operating systems, subsystems, browsers, and monitors that you can use to run your current versions of BMC Capacity Management for Mainframes products and components.

### Table 3  Supported operating systems for mainframe

<table>
<thead>
<tr>
<th>Operating systems/Mainframe</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS 1.12</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>z/OS 1.11</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>z/OS 1.10</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>z/OS 1.9</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>z/VM 6.1</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>z/VM 5.4</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>z/VM 5.3</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>z/VM 5.2</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>z/VM 5.1</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4  Supported operating systems for PC

<table>
<thead>
<tr>
<th>Operating systems/PC</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 7</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows Vista SP1</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows XP SP3</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows 2008 Server SP1</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows 2008 Server R2</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows 2003 Server R2</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 5  Supported browsers

<table>
<thead>
<tr>
<th>Browsers</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Explorer 8.0</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Explorer 7.0</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Explorer 6.0</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 6  Supported monitors

<table>
<thead>
<tr>
<th>Monitors</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMF MONITOR 5.7.x</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CMF MONITOR 5.6.x</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

### Table 7  Supported subsystems—IBM CICS®

<table>
<thead>
<tr>
<th>CICS</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CICS TS 4.1 (also 6.6)</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 6</td>
</tr>
<tr>
<td>CICS TS 3.2 (also 6.5)</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.7.00</td>
</tr>
<tr>
<td>CICS TS 3.1 (also 6.4)</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.4.01 patch V199341</td>
</tr>
<tr>
<td>CICS TS 2.3 (also 6.3)</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.4.00</td>
</tr>
<tr>
<td>MainView for CICS 6.3.00</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 6</td>
</tr>
<tr>
<td>MainView for CICS 6.2.00</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 6</td>
</tr>
<tr>
<td>MainView for CICS 6.1.00</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.7.00</td>
</tr>
<tr>
<td>TMON for CICS 3.2</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 6</td>
</tr>
<tr>
<td>TMON for CICS 3.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.5.00 patch V218633</td>
</tr>
<tr>
<td>TMON for CICS 2.3</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.4.01</td>
</tr>
</tbody>
</table>

* Requires a license for BMC Performance Analyzer for Mainframe Applications.
### Table 8  Supported subsystems—IBM DB2®

<table>
<thead>
<tr>
<th>DB2</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2 9.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.6.00</td>
</tr>
<tr>
<td>DB2 8.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.4.00</td>
</tr>
<tr>
<td>DB2 7.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.2.00</td>
</tr>
<tr>
<td>MainView for DB2 9.2</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 7</td>
</tr>
<tr>
<td>MainView for DB2 9.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 7</td>
</tr>
<tr>
<td>MainView for DB2 8.2</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 7</td>
</tr>
</tbody>
</table>

* Requires a license for BMC Performance Analyzer for Mainframe Applications.

### Table 9  Supported subsystems—IBM IMS™

<table>
<thead>
<tr>
<th>IMS</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>MainView for IMS 4.4.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 6</td>
</tr>
<tr>
<td>MainView for IMS 4.3.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00</td>
</tr>
<tr>
<td>MainView for IMS 4.2.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.6.00</td>
</tr>
<tr>
<td>IMS Monitor 11.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00 patch 6</td>
</tr>
<tr>
<td>IMS Monitor 10.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00</td>
</tr>
<tr>
<td>IMS Monitor 9.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.4.01 patch V199341</td>
</tr>
<tr>
<td>IMS Monitor 8.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.3.01</td>
</tr>
</tbody>
</table>

* Requires a license for BMC Performance Analyzer for Mainframe Applications.
## Table 10  Supported subsystems—IBM WebSphere® MQ

<table>
<thead>
<tr>
<th>WebSphere MQ</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebSphere MQ for z/OS 7.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>* Requires a license for BMC Performance Analyzer for Mainframe Applications.</td>
</tr>
<tr>
<td>WebSphere MQ for z/OS 6.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td></td>
</tr>
<tr>
<td>WebSphere MQ for z/OS 5.3.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td></td>
</tr>
</tbody>
</table>

## Table 11  Supported subsystems—IBM WebSphere Application Server

<table>
<thead>
<tr>
<th>WebSphere Application Server</th>
<th>BMC Performance Predictor for Mainframes</th>
<th>BMC Performance Analyzer for Mainframes</th>
<th>BMC Performance Analyzer for Mainframe Applications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebSphere Application Server 7.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.8.00</td>
</tr>
<tr>
<td>WebSphere Application Server 6.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.6.00</td>
</tr>
<tr>
<td>WebSphere Application Server 6.0</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.5.00</td>
</tr>
<tr>
<td>WebSphere Application Server 5.1</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>Support started in version 1.5.00</td>
</tr>
</tbody>
</table>

* Requires a license for BMC Performance Analyzer for Mainframe Applications.
This chapter explains how to choose a distribution method for BMC Capacity Management for Mainframes products. You can obtain the product files either electronically or from a z/OS installation tape.

**NOTE**
This chapter applies to the z/OS components of BMC Capacity Management for Mainframes. For information about obtaining and installing the Universal Information Exchange/VM (UIE/VM) component, see Chapter 8, “Installing UIE/VM.”

## Electronic delivery

This section describes how to download the z/OS components of BMC Capacity Management for Mainframes from the BMC Electronic Product Distribution (EPD) facility. You can navigate to the EPD page from the Customer Support website at http://www.bmc.com/support.

### To download the z/OS components

1. Download the following image file from the EPD site:

   \texttt{bmcmsp-v1900-image.bin}

   This file, which contains a batch job, requires approximately 300 tracks on a 3390 disk. The file format is PS (physical sequential), LRECL=80, BLKSIZE=3120.

2. Make the following changes, as described in the comment section at the top of the image file:

   - Edit the job card to conform to your system requirements.
Specify a PREFIX value in the following line:

```c
/* PROFILE PREFIX(&USERID); */
```

— Uncomment the line by removing the characters /* and */.
— Change &USERID to the high-level qualifier that you want to use for the installation data sets.

Specify UNIT and VOLSER values in the following line:

```c
EXEC MVP1900.RECEIVE ‘UNIT(SYSALLDA)’;
```

— Set the UNIT value by changing SYSALLDA to the type of unit you want to use when allocating the installation data sets. The default is SYSALLDA.

— Set the VOLSER value by adding `VOL (vvvvvv)` within the quoted string, where `vvvvvv` specifies the VOLSER that you want to use when allocating the installation data sets. The default is that no specific VOLSER is specified.

3 Submit the batch job to expand the image file into installation data sets.

The expanded installation data sets require approximately 1,000 tracks on a 3390 disk.

When the job is complete, the installation data sets appear on your system. The high-level qualifier is the PREFIX value you specified, the middle-level qualifier is PASM, and the low-level qualifier is the data set type (such as CLIST or LOAD).

4 Using the same data set attributes as `prefix.PASM.CNTL`, create a PDS called `hiqual.midqual.CNTL`, where `hiqual` and `midqual` are the values you want to use for product data sets based on your site naming conventions.

5 Copy `prefix.PASM.CNTL` into `hiqual.midqual.CNTL`.

You are now ready to install the z/OS components of BMC Capacity Management for Mainframes products, as described in Chapter 4, “Installing products with the Online Installation Facility.”

**NOTE**

After you verify that the installation was successful, you can delete the downloaded image file and the expanded installation data sets. The data sets whose names begin with `hiqual.midqual` are product data sets. You should not delete the product data sets.
This section describes the contents and organization of the z/OS distribution tape, and how to unload the Installation Library.

How the z/OS distribution tape is organized

BMC distributes its BMC Capacity Management for Mainframes products on a 3490 cartridge medium. The VOLSER of the installation tape is in the format MVBAaa (where aaa represents three alphanumeric characters).

The distribution tape contains all the files you need to unload and install your licensed BMC Capacity Management for Mainframes products.

The characteristics and general organization of the distribution tape are summarized in Table 12. This information is provided to assist you in the process of unloading the files from the tape and installing the products on your system.

### Table 12  BMC Capacity Management for Mainframes tape characteristics

<table>
<thead>
<tr>
<th>File name</th>
<th>RECFM</th>
<th>LRECL</th>
<th>BLK</th>
<th>ORG</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC.PASM.CNTL</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PO</td>
<td>Installation Library</td>
</tr>
<tr>
<td>BMC.PASM.CLIST</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PO</td>
<td>CLIST Library</td>
</tr>
<tr>
<td>BMC.PASM.ISPMLIB</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PO</td>
<td>Message Library</td>
</tr>
<tr>
<td>BMC.PASM.ISPPLIB</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PO</td>
<td>Panel Library</td>
</tr>
<tr>
<td>BMC.PASM.ISPSLIB</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PO</td>
<td>Skeleton Library</td>
</tr>
<tr>
<td>BMC.PASM.ISPTLIB</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PO</td>
<td>Table Library</td>
</tr>
<tr>
<td>BMC.PASM.LOAD</td>
<td>U</td>
<td>NA</td>
<td>6144</td>
<td>PO</td>
<td>Load Module Library</td>
</tr>
<tr>
<td>BMC.PASM.SAMPJCL</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PO</td>
<td>Sample JCL Library</td>
</tr>
<tr>
<td>BMC.PASM.LINKLIB</td>
<td>U</td>
<td>NA</td>
<td>6144</td>
<td>PO</td>
<td>SAS C Runtime Library</td>
</tr>
<tr>
<td>BMC.PASM.HRWRFIL</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PS</td>
<td>Hardware File</td>
</tr>
<tr>
<td>BMC.PASM.UIEPCEXE</td>
<td>FB</td>
<td>80</td>
<td>6160</td>
<td>PS</td>
<td>UIE/PC Installation Files</td>
</tr>
<tr>
<td>BMC.PASM.TARGETS</td>
<td>VB</td>
<td>260</td>
<td>27998</td>
<td>PS</td>
<td>TARGETS File</td>
</tr>
<tr>
<td>BMC.PASM.CONFIG</td>
<td>VB</td>
<td>260</td>
<td>27998</td>
<td>PS</td>
<td>Configuration File</td>
</tr>
</tbody>
</table>
Unloading the Installation Library from tape

To unload the Installation Library, unload the first file on the distribution tape to a data set named

\[ \text{hiqual.midqual.CNTL} \]

where \text{hiqual} and \text{midqual} are parameters that you assign to identify the data set naming conventions to be used for your products.

1. Tailor the TAPEREAD JOB, as shown in Figure 1 on page 27, to conform to the standards in effect at your site.

The TAPEREAD JOB unloads the Online Installation Facility. Perform the following actions:

A. Verify that the volume serial number written on the external label of the distribution tape matches the value of the VOL=SER parameter in the DD statement INDD1.

B. Verify that the tape unit matches naming requirements at your site.

C. Specify \text{hiqual} and \text{midqual} parameters in the DD statement OUTDD1 to identify the data set naming conventions that you want to use for the products.

You use these parameters to invoke the product.

D. Specify a disk volume VOL=SER=xxxxxx for the DD statement OUTDD1, where \text{xxxxxx} identifies the disk to which you want to unload the Online Installation Facility.

Make sure that the disk unit matches the naming requirements at your site.
Unloading the Installation Library from tape

Chapter 3 Choosing a distribution method

Figure 1 Tailoring the TAPEREAD JOB

```
/TAPEREAD JOB <YOUR INSTALLATION PARAMETERS>
/*
/* JOB TO UNLOAD THE OS/390 PRODUCT INSTALLATION LIBRARY
/*
//GETFIRST EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//INDD1 DD DSN=BMC.PASM.CNTL,DISP=OLD,
//      UNIT=tape,VOL=SER=MVBxxx,
//      LABEL=(1,SL)
//OUTDD1 DD DSN=hiqual.midqual.CNTL,DISP=(NEW,CATLG,DELETE),
//      UNIT=disk,VOL=SER=xxxxxx,
//      SPACE=(TRK,(30,3,15),RLSE)
//SYSIN DD *
   COPY OUTDD=OUTDD1,INDD=INDD1
```

2 Submit the tailored TAPEREAD JOB.

The Installation Library is unloaded from the distribution tape onto your system.
Installing products with the Online Installation Facility

This chapter describes how to invoke and use the Online Installation Facility.

Using the Online Installation Facility

The Online Installation Facility simplifies the task of building the JCL that unloads your products from the BMC Capacity Management for Mainframes distribution tape. The Main Menu options are numbered 0 through 4 and are designed to be performed in that order. An Online Help Facility, accessed with the PF1 key, can assist you while you are using the Online Installation Facility panels.

This section describes

- preliminary considerations
- how to invoke the Online Installation Facility
- the Main Menu and the tasks associated with it
- navigation advice

The data set name for the Product Control File must have the following format:

\[ hiqual.usermid.CONTROL \]

where \( hiqual \) and \( usermid \) are parameters that you assign.

The Product Control File is used by the Online Installation Facility. If you do not have a Product Control File, which resulted from a prior installation of the products, you need to create it. Refer to the Product Control Letter, which BMC sends to all customers. The Product Control Letter describes the contents of the Product Control File.
If you want to use a HRWRFIL other than the standard hardware file that was included on the tape, you must put it in a data set with the following name:

userid.userprf.HRWRFIL

### Before you begin

Before you begin using the Online Installation Facility, be sure to review

- system requirements for product installation (see Chapter 2, “System requirements for product installation”).
- available distribution methods (see Chapter 3, “Choosing a distribution method”).

**NOTE**

BMC products require an LE Library, version 1.8 or later. If you are running z/OS version 1.1 or later, you will have the proper LE version.

Most sites have the LE library in the link list or link pack area, however, if your LE library is *not* in your link list or link pack area, you must perform all of the following:

1. Specify the LE/370 library for Option 0.
2. Allocate the LE library in your logon PROC to STEPLIB.
3. Concatenate the LE library to all STEPLIB allocations in product JCL.

Before unloading the BMC Capacity Management for Mainframes tape, verify the following information:

- The record format of the CLIST library (VB or FB) at your site.

To auto tailor existing products without reinstalling them from the distribution tape, change the **Auto Tailor an Existing Installation** field to **YES** in Option 1: Data Set Parameters.

You can use Auto Tailoring to change

- JCL parameters from Option 0: JCL Parameters.

Invoke the current installation facility as described in the next section, and change any JCL parameters.
Invoking the Online Installation Facility

Use the following procedure to invoke the Online Installation Facility:

1. Log on to TSO.
2. Enter an ISPF environment.
3. On the COMMAND line, type the following entry:

   
   `TSO EX 'hiqual.midqual.CNTL(BMCUNLD)' 'HIUNLD(hiqual) MIDUNLD(midqual)'`

   Where `hiqual` and `midqual` are the values that you specified for product data sets.

   **NOTE**

   If this command does not fit on the COMMAND line, you can either abbreviate HIUNLD to H and MIDUNLD to M, or you can enter the command through ISPF Option 6, which allows the command to run on to a second line.

---

**WARNING**

If you change `hiqual` or `usermid`, verify that the Product Control File data set name (hiqual.usermid.CONTROL) is the same as the current Product Control File data set name. This name is specified from Option 2: Product Control File.

---

**NOTE**

To change any fields other than `hiqual` and `midqual`, you must use the logon ID of the original installer for the existing installation.

---

If you already specified the name of an LE Library, you cannot set that parameter back to NONE or change that parameter to the name of another LE Library.
4 Press Enter.

The system displays a BMC logo during initialization. When initialization is complete, three asterisks (***) appear at the bottom of the screen.

5 Press Enter.

The system displays the Online Installation Facility main menu, shown in Figure 2.

**Figure 2** Online Installation Facility main menu

Panel M: Main ----- CMM Online Installation Facility ----- (Release v.r.mm)--
OPTION ===>  
Select and perform options 0 through 4 on this menu in the order listed.

0 JCL PARAMETERS - Specify JCL Parameters for UNLOAD Job
1 DATA SET PARAMETERS - Specify Data Set Parameters for UNLOAD Job
2 BMC CONTROL FILE - Create/Modify/View BMC Control File
3 RUNTIME LIBRARIES - Specify Runtime Libraries
4 UNLOAD JCL - Build/Edit/Submit Unload JCL
X EXIT - Exit from Installation Facility
-------------------------------------------------------------------------------
Main Menu options

This section describes the options on the Main Menu. If the Online Installation Facility encounters any problems, it issues error messages. See Chapter 9, “Installation error messages” for a listing and description of these messages.

Option 0—JCL Parameters

Use this option to specify job parameters, such as tape and disk unit names, tape and disk volume serial numbers, sysout class, and job card information (Figure 3).

NOTE
If you downloaded the product files electronically, leave the default values for Tape Unit and Tape VOLSER in place even though you are not using a tape in this process.

Figure 3   Panel 0—JCL Parameters

Panel 0: JCL Parameters ----- CMM Online Installation Facility --------------
COMMAND ===> Specify Tape, Disk, and SYSOUT Information:
TAPE UNIT ===> TAPE       TAPE VOLSER ===> MVB6CB
PRODUCT DISK UNIT ===> 3390  PRODUCT DISK VOLSER ===> DISK01
USER DISK UNIT ===> SYSALLDA  USER DISK VOLSER ===> DISK01
WORK DISK UNIT ===> DISK     SYSOUT CLASS (MSGS) ===> A

Specify JOB CARD Information:
 ===> //*
 ===> //*
 ===> //*

If the LE Runtime Library is not in your Link Pack Area, then specify the library data set name(s).
LE RUNTIME LIBRARY ===> NONE
 ===> NONE

CMM Online Installation Facility
Option 1—Data Set Parameters

Use this option to specify the data set parameters, system information, and processing options (Figure 4).

**NOTE**

If you downloaded the product files electronically, use the PREFIX value that you specified in the image file in the Electronic Delivery High Qualifier field.

The Online Installation Facility uses the values that you specify on this panel to perform the following tasks for all product data sets that need to be tailored:

- Set the data set names of product files.
- Set the data set name of the mandatory Product Control File `hiqual.usermid.CONTROL`.
- Choose whether the CLIST library should be fixed block or variable block.
- Specify processing options.

Figure 4   Panel 1—Data Set Parameters

Panel 1: Data Set Parameters  CMM Online Installation Facility 

**COMMAND ===>**

Specify Data Set Name Qualifiers:

- **HIGH LEVEL QUALIFIER (HIQUAL)**  ===> USER01
- **MIDDLE LEVEL QUALIFIER (MIDQUAL)**  ===> Rvrmm
- **TSO USER PREFIX (USERPRF)**  ===> &SYSUID
- **USER MIDDLE LEVEL QUALIFIER (USERMID)**  ===> BGSUSER
- **BATCH USER PREFIX (PREFIX)**  ===> PREFIX
- **ELECTRONIC DELIVERY HIGH QUALIFIER**  ===> 

Note: Leave Electronic Delivery High Qualifier blank if installing from tape.

Specify System Information and Processing Options:

- **CLIST LIBRARY RECORD FORMAT**  ===> VB (FB/VB)
- **PORT NUMBER**  ===> 2052
- **CONVERT PANEL LIBRARIES TO UPPER CASE**  ===> OFF (ON/OFF)
- **AUTO TAILOR AN EXISTING INSTALLATION**  ===> NO (YES/NO)
- **RELEASE UNUSED DISK SPACE**  ===> NO (YES/NO)

Note: Release unused disk space and Convert panels increases execution time.

-----------------------------------------------------------------------------------------------

PF1 Help   PF3 End   PF10 Previous Step   PF11 Next Step   CANCEL Exit/No Save
**Option 2—Control File**

Use this option to create, modify, or view your Product Control File (Figure 5), depending on whether you are a new or current customer (as indicated in Table 13).

**Table 13  Product Control File**

<table>
<thead>
<tr>
<th>Customer status</th>
<th>Product Control Letter</th>
<th>Product Control File</th>
</tr>
</thead>
<tbody>
<tr>
<td>New customer</td>
<td>new letter is received</td>
<td>new file is created</td>
</tr>
<tr>
<td>Current customer</td>
<td>updated letter is received</td>
<td>current file is updated</td>
</tr>
<tr>
<td>Current customer</td>
<td>no letter</td>
<td>no user action is required</td>
</tr>
</tbody>
</table>

Follow these precautions and requirements that apply to the Product Control File:

- Store your Product Control File in a data set that is not replaced when you unload data sets for some future product release. The required name for this file is `hiqual.usermid.CONTROL`, where `hiqual` and `usermid` are parameters that you assign when you use the Online Installation Facility. Note that the second qualifier is `usermid` not `midqual`.

- Store the Product Control File on a disk so that it is accessible to all of your products.

- You **must** store the Product Control File in a sequential data set, 80 byte logical record length, fixed block record format.

**Figure 5  Panel 2—Control File Menu**

Panel 2: Control File Menu -------CMM Online Installation Facility --------
OPTION ==>

Select options from this menu to create, modify or view a BMC Control File.

1 CREATE/EDIT - Create a new BMC Control File, or edit an existing one
2 BROWSE - Browse current BMC Control File
3 COPY - Copy an old BMC Control File to current BMC Control File

For option 3 (COPY), specify the name of the old BMC Control File data set to be copied ==>

For all options, the name of the CURRENT BMC Control File data set is:

==> USER01.BGSUSER.CONTROL

Note: The data set name of the CURRENT BMC Control File is determined by the HIQUAL and USERMID parameters set in Option 1: Data Set Parameters.
**Option 3—Runtime Libraries**

Use this option (Figure 6) to select your preferred runtime libraries, as follows:

- Set the MainView for CICS Load Library for Universal Information Exchange *(optional)*.

**Figure 6  Panel 3—Runtime Libraries**

![Panel 3: Runtime Libraries]

**Option 4—Unload JCL**

Use this option to edit the existing JCL as well as to create and/or submit the UNLOAD JCL for execution *(Figure 7)*.

The UNLOAD job produces an execution log, indicating the data sets that were tailored, the members in those data sets that were affected, and the number of lines changed within each member. The log is written to SYSPRINT in the output job listing.

Some sites do not allow you to create and load data sets in the same job. In that case, you should choose Option 4 (to create the data sets) and Option 5 (to load the data sets) on the Edit and/or Submit JCL panel. All other users should choose Options 1, 2, or 3.
Interrupting the installation process

If you need to exit the Online Installation Facility before you complete the installation process, you can resume installing later, review the steps that you performed previously by accessing Panels 0 through 3, and then complete the installation.

Navigation advice

Execute the Main Menu options in the order in which they appear on the menu, from 0 through 4. Each step contributes to the process of building the JCL (Steps 0 through 3) and then creating, editing, and/or submitting (Step 4) the UNLOAD JCL.

The two ways to navigate the steps are listed in Table 14.

<table>
<thead>
<tr>
<th>Using the Main Menu</th>
<th>Using the PF11 key</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select an option on the Main Menu.</td>
<td>1. Select Option 0 from the Main Menu.</td>
</tr>
<tr>
<td>2. Complete the step.</td>
<td>2. Complete the step.</td>
</tr>
<tr>
<td>3. Press PF3 to return to the Main Menu.</td>
<td>3. Use the PF11 key to move through the subsequent steps.</td>
</tr>
<tr>
<td>4. Select the next step.</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

**Figure 7**  Panel 4—Edit and/or Submit JCL

Panel 4: Edit and/or Submit JCL ------ CMM Online Installation Facility -------
OPTION ===> 
Select options from this menu to edit and/or submit your Unload JCL.

1 BUILD/EDIT    - Build/Edit Unload JCL
2 BUILD/SUBMIT  - Build/Submit Unload JCL
3 EDIT/NO BUILD - Edit Existing Unload JCL (Do NOT Build)

If you are unable to create data sets and unload from tape into those data sets in the same job, do not use options 1, 2, or 3. Instead use options 4 and 5 to perform those steps separately.

4 BUILD/EDIT Create - Build/Edit Data Set Creation JCL
5 BUILD/EDIT Unload - Build/Edit Unload JCL
Each panel displays the PF keys and commands that are active for that panel. Table 15 shows the keys and commands available at any given time.

**Table 15  Key commands and descriptions**

<table>
<thead>
<tr>
<th>Keys/Commands</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF1/HELP</td>
<td>displays help information for the current panel</td>
</tr>
<tr>
<td>PF3/END</td>
<td>saves the information on the current panel and returns you to the preceding panel</td>
</tr>
<tr>
<td>PF10/BACK</td>
<td>saves the information on the current panel and returns to the step preceding to the current panel</td>
</tr>
<tr>
<td>PF11/FORWARD</td>
<td>saves the information on the current panel and proceeds to the step following the current panel</td>
</tr>
<tr>
<td>CANCEL</td>
<td>exits to the preceding panel without saving the changes made to the current panel</td>
</tr>
</tbody>
</table>

**Recording data set qualifiers**

Use the form in Table 16 to record the names that you assigned to the product data sets when you installed them. During the installation process, you might have used or changed the default hiqual, midqual, userprf, and usermid qualifiers that are used for the product data sets.

The capacity planner in your organization who will be using these products might need to know the names you assigned to these qualifiers. If so, you can supply the capacity planner with a copy of this page.

**Table 16  Data set qualifiers form**

<table>
<thead>
<tr>
<th>Qualifier for installation data sets</th>
<th>Qualifier for user data sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>hiqual:</td>
<td>userprf:</td>
</tr>
<tr>
<td>midqual:</td>
<td>usermid:</td>
</tr>
</tbody>
</table>
Choosing an invocation method

This chapter explains how to choose an invocation method for BMC Capacity Management for Mainframes products. Also included is a table describing the parameters that you can specify in the invocation statements for execution CLISTs.

Product invocation methods

You can select and run products from the BMC Capacity Management for Mainframes menu (Figure 10 on page 43). You have a choice of two methods for invoking this menu:

- invoking from the native TSO READY message
- invoking from the ISPF Primary Menu

These methods are shown in Figure 8 on page 40 and described in the following sections.

Invoking products from native TSO

If you choose to invoke products from native TSO, you do not have to tailor your LOGON PROCs, nor do you need to make any special provisions for allocating the ISPF libraries that are supplied by BMC.

When using the native TSO method, you can invoke the BMC Capacity Management for Mainframes menu by typing the following command after the READY message:

```
TSO EXEC 'hiqual.midqual.CLIST(BIMVSGP)'
```
This command displays the ISPF Menu that is supplied with the product. From the ISPF Menu, select B to invoke the BMC Capacity Management for Mainframes menu (Figure 8).

You can use this method to invoke a product directly. For example, to invoke Universal Information Exchange using the UIE CLIST, type the following command at the READY message:

```
TSO EXEC 'hiqual.midqual.CLIST(MVUIE)'
```

Figure 8  BMC Capacity Management for Mainframes Menu invocation method
Invoking the Main Menu from the ISPF Primary Menu

If you choose to invoke products from the ISPF Primary Menu, you can use either of the following approaches.

- Issue the following invocation command from the ISPF command line:

  ```command
  COMMAND===>TSO EXEC 'hiqual.midqual.CLIST(B1MVSGP)'
  ```

**NOTE**
You can invoke products from the command line on any ISPF panel (except an EDIT panel).

- Select an option added to the ISPF Primary Menu, as shown in Figure 9 on page 43.

If you use either approach to invoke the products, you must provide for the proper allocation of ISPF libraries. If you choose to add an option to the ISPF Primary Menu, you must tailor member ISR@PRIM in the ISPF panel library. The following sections describe these requirements.

**Standard ISPF library allocation techniques**

Regardless of the invocation method used, whenever you invoke one of the BMC Capacity Management for Mainframes products, you must make allocations for the ISPF libraries and the libraries supplied with the product. BMC uses LIBDEFs to handle allocation of the required libraries.

**Tailoring member ISR@PRIM in the ISPF panel library**

If you want to invoke the BMC Capacity Management for Mainframes menu from the ISPF Primary Menu, you must tailor the panel (ISR@PRIM) of your ISPF panel library. BMC supplies a standard version of this panel (named BGS@PRIM).

If this supplied version is acceptable, proceed as follows:

1. Edit

   ```hlq.hlq.ISPPLIB(BGS@PRIM)
   ```

   and make `hiqual.midqual` consistent with the `hiqual.midqual` that you specified for your installation.

2. Replace your ISR@PRIM member with the member BGS@PRIM.
Invoking the Main Menu from the ISPF Primary Menu

If your regular main menu is different from the BMC version and you want to retain it, do the following actions:

1. Match the BGS@PRIM member to the ISR@PRIM panel at your site.

   The BGS@PRIM member of hiqual.midqual.ISPPLIB includes the standard options provided by IBM, as well as a new option for selecting the BMC Capacity Management for Mainframes menu.

2. If your site has added other options that you want to use, edit ISR@PRIM as follows to add just the BMC Capacity Management for Mainframes menu option:

   A. Type the following line in the body of the panel to create a new menu option.

   B + BMC Products - Display BMC Capacity Management for Mainframes Menu

   B. "CMD(EX ''hiqual.midqual.CLIST(B1MVSGP)'')  NEWAPPL(GPM)"

   You must manually tailor hiqual and midqual to be the same values that you chose for hiqual and midqual, when you unloaded the distribution tape.

   **NOTE**

   If you already have an Option B, you can use another letter or number, as long as you use the same letter or number in both parts of step 2.
Chapter 5 Choosing an invocation method

Figure 9  Accessing the Main Menu from the ISPF Primary Menu

**ISPF Primary Option Menu**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>More:</th>
<th>+</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Settings</td>
<td>User ID.: USER01</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>View</td>
<td>Time.: 10:04</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Edit</td>
<td>Terminal.: 3270</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Utilities</td>
<td>Screen.: 1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Foreground</td>
<td>Language.: ENGLISH</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Batch</td>
<td>Appl ID.: ISR</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Command</td>
<td>TSO logon: $$B1PSAL</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Dialog Test</td>
<td>TSO prefix: USER01</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>BMC Prime</td>
<td>System ID.: ESAM</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>IBM Products</td>
<td>MVS acct.: 5990</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>SCLM</td>
<td>Release.: ISPF 5.2</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>APPL CTL SYS</td>
<td>BMC Application Control System</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>BMC PRODUCTS</td>
<td>BMC Product Menu</td>
<td></td>
</tr>
<tr>
<td>MV</td>
<td>MainView</td>
<td>MainView Product Menu</td>
<td></td>
</tr>
<tr>
<td>CN</td>
<td>MainCand</td>
<td>MainView Cand Menu (SYSM/SYSO)</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>XDC</td>
<td>Xtended Debugging Controller</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>DMS</td>
<td>DMS Archive Retrieval Services</td>
<td></td>
</tr>
<tr>
<td>Option===&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>Help</td>
<td>F2=Split</td>
<td></td>
</tr>
<tr>
<td>F3</td>
<td>Exit</td>
<td>F7=Backward</td>
<td></td>
</tr>
<tr>
<td>F8</td>
<td>Forward</td>
<td>F9=Swap</td>
<td></td>
</tr>
<tr>
<td>F10</td>
<td>Actions</td>
<td>F12=Cancel</td>
<td></td>
</tr>
</tbody>
</table>

Figure 10  BMC Capacity Management for Mainframes Main Menu

```
------------------ BMC Capacity Management for Mainframes---------(Version v.r.mm)--
OPTION ===>
1 - Universal Information Exchange
R - README FILE
E - EXIT
```

---

Chapter 5  Choosing an invocation method  43
Special parameters for product invocation CLISTs

Table 17 lists and explains the parameters that you can specify in the invocation statement for a BMC z/OS execution CLIST. The table includes

- parameter names
- names of the CLISTs that accept the parameters
- brief explanations of the purposes of the parameters

Figure 11 on page 45 provides examples of specifying invocation statements with the parameters included.

Table 17  Parameters for BMC z/OS product invocation CLISTs

<table>
<thead>
<tr>
<th>Parameter</th>
<th>CLIST Using</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBUG(ALL)</td>
<td>B1MVSGP MVUIE</td>
<td>Used for problem diagnoses in the CLIST. It is used if any difficulty arises when trying to invoke a product. In debug mode, the CLIST lists all statements and displays messages on the terminal as it executes. The DEBUG parameter turns on LIST, SYMLIST, CONLIST, and MSG.</td>
</tr>
<tr>
<td>NOCONCAT</td>
<td>B1MVSGP MVUIE</td>
<td>Suppresses all ISPF file allocations, FREEs and LIBDEFs in the invoking CLIST. This parameter is used if either of the following conditions are true.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IF you allocate CLIST and ISPF libraries in:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your LOGON PROC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your own CLIST</td>
</tr>
<tr>
<td></td>
<td></td>
<td>THEN you must specify:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The NOCONCAT parameter.</td>
</tr>
</tbody>
</table>

**NOTE**

To use defaults supplied with each new release, delete or rename the members of your ISPF profile pool which are prefixed with BGS, BGSU, BSA, CHC, IOD, or GPM. If you want to preserve parameter settings and/or workload definitions made under an earlier release, be sure not to delete or rename these members.
Figure 11 shows examples of product invocation statements, with various parameters included.

<table>
<thead>
<tr>
<th>Figure 11 Sample product invocation statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSO EXEC ‘hiqual.midqual.CLIST(BIMVSIGP)’ ‘DEBUG(ALL) NOCONCAT’</td>
</tr>
<tr>
<td>TSO EXEC ‘hiqual.midqual.CLIST(MVUIE)’ ‘DEBUG(ALL) NOCONCAT’</td>
</tr>
<tr>
<td>TSO EXEC ‘hiqual.midqual.CLIST(MVUIE)’</td>
</tr>
</tbody>
</table>

ISPF tables for Universal Information Exchange

The internal format of the ISPF table data set that contains the Universal Information Exchange (UIE) studies and their associated data changes from version to version. If you are an existing UIE user, each of the TSO users that has executed the UIE version 1.x.00 ISPF front end has created some or all of the following data sets:

```
userid.userprf.E2TB1x00
userid.userprf.E2FT1x00
userid.userprf.E2CT1x00
userid.userprf.E2MT1x00

```

The `userid.userprf.E2CT1x00` and `userid.userprf.E2MT1x00` data sets contain temporary data and can be safely deleted at any time. `userid.userprf.E2FT1x00` data set contains the JCL that was created as a result of the ISPF file tailoring that occurs whenever you invoke Option 5, Build the job and command input stream, from the Universal Information Exchange Main Menu. Any JCL that is generated by the UIE version 1.x.00 ISPF front end is stored in this data set.

You might have one or more members of that partitioned data set that you want to copy over to the corresponding UIE version 1.x.00 data set. The data set `userid.userprf.E2TB1x00` contains the five tables that contain all of your existing studies and their associated data. The member names are

```
E2KTCMD
E2KTDSN
E2KTJCL
E2KTRL
E2KTSYS
```

When a TSO user invokes the UIE version 1.x.00 ISPF front end for the first time, the product allocates a data set named `userid.userprf.E2TB1x00` and primes it with the data for a single default study. After you have tested the new version for a reasonable period, you can follow this simple process to convert your old studies to the new
format if you want to retain them. Use any of the standard z/OS methods for copying partitioned data set members to copy all five members of `userid.userprf.E2TB1x00` to the new `userid.userprf.E2TB1x00`. ISPF Option 3.3 is probably the easiest method to use. BMC recommends that you:

- Do not attempt to convert your existing ISPF tables.
- Be certain to copy all five members and be sure to specify REPLACE when you do the copy.
- Invoke the Universal Information Exchange version 1.x.00 ISPF front end.

You will see the BMC legal disclaimer and then the message

Converting your ISPF data tables from 1.x.00 to 1.x.00.

If the conversion succeeds, the Universal Information Exchange Main Menu version 1.x.00 is displayed along with the following message:

UIE0083I: RELEASE 1.x.00 OF UIE REPLACING RELEASE 1.x.00

If the conversion fails, you will see the following message:

The conversion of the data tables contained in your ISPF table library to the current release has failed.

Re-running MVUIE in debug mode by using the following form of the command might give you more information:

```
EXEC '&HIQUAL..&MIDQUAL..CLIST(MVUIE)' 'DEBUG(ALL)'
```

After the failure message, the Universal Information Exchange ISPF front end exits. If this does occur, contact BMC Customer Support for help. After you have converted your existing studies, they will no longer work properly in any older version of UIE.
Connecting UIE and Mainframe Predictor

This chapter describes how to configure and connect Universal Information Exchange (UIE) on the z/OS server and BMC Performance Predictor for Mainframes on your PC.

Configuring the started task on the z/OS server

When you install Universal Information Exchange (UIE) on the z/OS server, it automatically customizes a job in the hiqual.midqual.SAMPLJCL library named E2COMM. The version that BMC sends you looks like the following JCL (Figure 12 on page 48).
Configuring the started task on the z/OS server

**Figure 12  E2COMM JCL sample**

```
//E2COMM JOB (ACCOUNT).', USER NAME ',
// CLASS=A,MSGCLASS=X,TIME=1440
//*
//** WHEN YOU ARE READY TO RUN THIS PROGRAM IN PRODUCTION MODE
//** (PROBABLY AS A STARTED TASK) YOU MAY REMOVE ALL THE STEPS EXCEPT
//** THE E2COMM STEP. THE OTHER STEPS EXIST TO CREATE AND PRIME THE
//** TARGETS FILE WHILE YOU ARE RUNNING THE PROGRAM IN TEST MODE.
//** PLEASE DO NOT FORGET TO REMOVE THE OVER-RIDE OF THE 'SYSUT1'
//** DD FOR THE 'INIT' STEP WHICH IS FOUND AT THE BOTTOM OF THE JOB.
//**
//** NOTE: THE E2COMM PROGRAM LISTENS FOR THE FOLLOWING CONSOLE
//** COMMANDS - "STOP E2COMM" OR "MODIFY E2COMM,STOP" IN ORDER
//** TO PROVIDE FOR A CLEAN SHUT DOWN.
//**
//** START  PROC E2COMM
//**
//E2COMM   PROC HIQUAL='BMCMVP',
//    MIDQUAL='UIE.R1x00',
//    PORT='2052'
//*
//ALLOC   EXEC PGM=IEFBR14
//TARGETS   DD  DISP=(MOD,CATLG),
//    UNIT=SYSALLDA,
//    SPACE=(TRK,(1,5)),
//    LRECL=260,
//    BLKSIZE=0,
//    RECFM=VB,
//    DSORG=PS,
//    DSN=&HIQUAL..&MIDQUAL..TARGETS
//*
//EMPTY    EXEC PGM=E2NULL
//STEPLIB   DD  DISP=SHR,
//    DSN=&HIQUAL..&MIDQUAL..LOAD
//    DD DISP=SHR,
//    DSN=&HIQUAL..&MIDQUAL..LINKLIB
//SYSTERM   DD  SYSOUT=*
//SYSUT1   DD  DISP=SHR,
//    DSN=&HIQUAL..&MIDQUAL..TARGETS
//*
// IF (EMPTY.RC=1) THEN
//INIT     EXEC PGM=IEBGENER
//SYSPRINT  DD  SYSOUT=*
//SYSUT1   DD  DUMMY
//SYSUT2   DD  DISP=OLD,
//    DSN=&HIQUAL..&MIDQUAL..TARGETS
//SYSIN    DD  DUMMY
// ENDIF
//*
```
The E2COMM job runs as a started task after you have completed the entire installation and customization process and have begun to run Universal Information Exchange programs in a production mode.

The E2COMM program listens for the z/OS console commands, STOP E2COMM or MODIFY E2COMM, STOP to provide for a clean shutdown.
Make sure the E2COMM program, running as either a batch job or started task, is automatically started on your z/OS server following the initialization of TCP/IP. You want the E2COMM program to run continuously so that the workstation where you analyze the Universal Information Exchange data can connect to it at any time. You can run it continuously as a batch job, but be aware that the E2COMM program occupies an initiator as long as it runs.

**Configuring TCP/IP settings**

When you install BMC Performance Predictor for Mainframes, you need to choose the port number or accept the default setting of 2052 for the host and the local ports. Your selections must be within the range of 1025 to 5000. These port numbers do not need to match. The TCP/IP Settings dialog box appears as shown in Figure 13.

![Figure 13 Checking the TCP/IP settings](image)

This dialog box shows the default settings for the Host and Local ports. If you want to change either setting, do so in this dialog box. However, you do not need to change the settings unless you have a conflict with another product.

**NOTE**

You can change the Local Port Number if you want. The Host Port Number must be the same number specified during installation of Universal Information Exchange. You should only change the Host Port Number on the PC after the mainframe systems programmer has changed the Host Port Number in the E2COMM started task’s JCL and restarted E2COMM.

For more information about installing BMC Performance Predictor for Mainframes, see the *BMC Performance Predictor for Mainframes Getting Started Guide*. 
Assigning the RACF ID

Because the E2COMM program uses TCP/IP on the z/OS server, it requires access to the UNIX® System Services (USS) component of z/OS. This means that the IBM RACF® profile for the job or started task must include the RACF Open Edition (OE) segment.

**NOTE**
Open Edition is the name formerly used by IBM for Unix System Services.

The OE segment enables the E2COMM program to have read access to USS in order to issue TCP/IP socket calls. This condition is more likely to be an issue for you if you choose to run the E2COMM program as a started task because most started tasks have more carefully controlled RACF profiles.

After the Universal Information Exchange installation

After you have installed Universal Information Exchange (UIE) on the z/OS server and your workstation, the following series of events can occur:

- The workstation can connect with the E2COMM program using TCP/IP and convey its IP network address.

- The E2COMM program stores the workstation’s IP network address in the *hiqual.midqual*.TARGETS data set.

- At a later time, the Universal Information Exchange analysis and aggregation batch job runs, collecting 24 hours of your system SMF data and producing a series of model files.

- The second step in this batch job reads your workstation’s IP address from the *hiqual.midqual*.TARGETS data set, opens a connection to the workstation and transmits the model files, which were created in step one of the batch job.

- If and when the workstation’s IP address changes, it can connect to the E2COMM program again and have E2COMM update its IP address for later use by the Universal Information Exchange analysis and aggregation batch job.

- Should site restrictions not permit the execution of E2COMM, a site can, alternatively, use the job found in *hiqual.midqual*.SAMPLJCL(TARGETS).

- To store the workstation’s IP address in *hiqual.midqual*.TARGETS, you must know the IP address and name of the workstation to run the TARGETS job.
Connecting UIE and BMC Performance Predictor for Mainframes

The z/OS server needs to be running the E2COMM started task and using a TCP/IP network to connect with Data Subscription Facility on the PC. Data Subscription Facility is the tool running on the PC that enables you to subscribe to a data publisher on the z/OS server. When you start the BMC Performance Predictor for Mainframes, the Data Subscription Facility starts up automatically if you are not subscribed to a data publisher. In that case, you need to subscribe to the z/OS server, as described in the following section.

Starting the Data Subscription Facility

The first time you start the console after installation, you receive the message that you have not yet subscribed to any data publisher as shown in Figure 14.

Figure 14  UEI Data Subscriptions Message

If you click **Subscribe Now**, the Data Subscription Facility window appears, as shown in Figure 15 on page 54.

If Data Subscription Facility has not been invoked automatically, perform one:

- Click the Data Subscription Facility button on the BMC Performance Predictor for Mainframes.
From the **Utilities** menu, choose **Data Subscription Facility**.

The Available Profiles section of the Data Subscription Facility window displays an empty Default Profile the first time you open it. You can use Profiles to store z/OS server addresses that you connect with. Currently, you have only one z/OS server, so you do not need to use this feature.
You cannot receive any baseline files from the z/OS server until you first subscribe by using this window.

Any IP Address or Hostname that you enter will appear in the Publishers tab. You can then select the IP Address or Hostname and click **Subscribe**.

**NOTE**

You can add only one IP Address or Hostname to the Publishers tab.

Your system looks for z/OS servers on all IP addresses in the range that you specified.

To subscribe a new data publisher:

1. In the Available Profiles pane, click a profile.

   If you do nothing, the **Default profile** is used.

   Any IP Addresses and Hostnames stored in the profile appear in the Publishers pane. You will see only one in the list.
2 Select one of the hostnames or IP addresses listed and go directly to step 6 or click Add, which opens the following Publisher Information dialog box (Figure 16).

![Publisher Information dialog box]

3 Enter the name or IP Address of your z/OS server and, optionally, a description of it.

4 Click OK.

5 In the Publishers pane, select the hostname or IP Address you just added.

6 Click Subscribe.

The Subscriptions dialog box is displayed, showing the progress of the operation. When the subscription is accepted, the Hostname and IP Address of the z/OS computer appear in the Subscriptions pane.

**NOTE**

When you use Data Subscription Facility to subscribe to a data publisher, it automatically cancels any previous subscriptions.

You can use the Remove and Modify buttons to remove or modify any hostname or IP address selected in the Publishers pane.

These steps and other features of the Data Subscription Facility tool are more fully described in the *BMC Performance Predictor for Mainframes User Guide*.

The Data Subscription process can find an IP Address or Hostname and list it as a “subscription” in Subscriptions pane only if the E2COMM started task on the z/OS server with that name or address is active.
You can right-click any entry in the Subscriptions pane to

- cancel your subscriptions
- download a data set on demand

**Using the Data Subscription Facility baseline browse function**

To enable BMC Performance Predictor for Mainframes users to use the Data Subscription Facility to browse for data sets, your systems programmer must create and populate a `CONFIG` file with baselines for you to access.

The Baseline Explorer tool contained within BMC Performance Predictor for Mainframes enables you to find the names of existing baselines on your z/OS host system and request that these baselines be sent to the PC for evaluation and subsequent use. As a security feature, this tool needs to be configured on the z/OS system before any baseline names can be transmitted to the PC.

If you want to enable PC users to see the baseline data sets on your z/OS system, you need to edit the `&HIQUAL..&MIDQUAL..CONFIG` file that was created during MPPC UIE installation and add a DD statement referencing that file to the JCL for the E2COMM started task. The JCL statement that you need to add to the E2COMM step within the started task is the following:

```plaintext
//CONFIG DD DISP=SHR,FREE=CLOSE,

// DSN=HIQUAL..MIDQUAL..CONFIG
```

Your systems programmer might add baseline data sets to the `CONFIG` file using a pattern of wildcards as illustrated in the following example. The example displays the correct format for the `CONFIG` file (Figure 17 on page 57).

You will see the data sets in the `CONFIG` file in the order that they appear in that file, usually with the most current baseline appearing first.

The E2COMM program must be active to use the baseline browse function.
Figure 17  Sample CONFIG file

```
EDIT       BMCMVP.UIE.R1x00.CONFIG                            Columns 00001 00072
COMMAND ===>______________________________________________________ SCROLL===> CSR
****** **************Top of Data****************************************************
000001 <? xml version="1.0"?>
000002 <BaselinePatternList>
000003 <Baseline Pattern="RDBSXC.*.BASELINE.PDS"></Baseline>
000004 <Baseline Pattern="RDBXYZ.*.BASELINE.*"></Baseline>
000005 </BaselinePatternList>
****** **************Bottom of Data************************************************
```

Data set names wildcard placement rules are as follows.

---

**NOTE**

These rules are the same pattern rules that are used by the IBM Catalog Search Interface facility.

---

If the * is in the middle of the data set name, any value for that field is accepted. For example the pattern

```
RDBSXC.*.BLZZZZZ
```

accepts the following data sets:

```
RDBSXC.AA.BLZZZZZ
RDBSXC.BB.BLZZZZZ
RDBSXC.CC.BLZZZZZ
```

If the * is at the end of the data set name, as long as the front of the pattern is satisfied, you can end it with anything. For example,

```
RDBSXC.AA.BL*
```

accepts the following data sets

```
RDBSXC.AA.BL.aa.bb
RDBSXC.AA.BL.bb.cc
RDBSXC.AA.BL.yyzza
```

For more information about browsing for baselines, see the *BMC Performance Predictor for Mainframes User Guide*. 
Installing UIE/PC

This chapter describes how to install Universal Information Exchange/PC (UIE/PC) in a Microsoft Windows environment.

Installation overview

The Universal Information Exchange/PC interface is installed on your Windows performance console machine. It enables you to create the same commands that you can create using the UIE command interface on your z/OS mainframe system. After you specify the commands, you can build and submit your JCL, just as if you were on the mainframe system.

If you have already created studies on your mainframe system, you can import them into the UIE/PC program on the Windows performance console machine, edit them, and then build and submit the JCL.

The program to install UIE/PC on Windows is called SETUP and it uses the InstallShield® Wizard to guide you through each step. In most of the wizard pages, you can accept the default options or enter your own values.

UIE/PC is distributed both on the BMC Performance Predictor for Mainframes CD and on the BMC Capacity Management for Mainframes mainframe tape. If you do not have access to the BMC Performance Predictor for Mainframes CD, you need to copy the UIE/PC installation program from your mainframe system to your PC using FTP or whatever file transfer program is available to you. UIE/PC is uploaded from the mainframe tape to data set hiqual.midqual.UIEPCEXE.
# System requirements

This section presents the system requirements for UIE/PC.

UIE/PC is a .NET application that runs on a PC running the Windows operating system. You need to be running

- ADO (ActiveX Data Objects) 2.6 or higher
- ODBC (Open Database Connectivity) drivers 3.5.17131.00 or higher

Table 18 provides guidelines for the versions of software and space requirements that you need to install and run UIE/PC from the console.

### Table 18  System requirements for Windows system

<table>
<thead>
<tr>
<th>Component</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk space</td>
<td>25 MB</td>
</tr>
<tr>
<td>Processor</td>
<td>1 GHz or higher</td>
</tr>
<tr>
<td>Operating system</td>
<td>Windows XP SP3 or later</td>
</tr>
<tr>
<td>Memory</td>
<td>256 MB or higher</td>
</tr>
<tr>
<td>Browser</td>
<td>Internet Explorer 6.0 or later</td>
</tr>
<tr>
<td>Page File Size</td>
<td>256 MB (recommended minimum size)</td>
</tr>
<tr>
<td>.NET</td>
<td>Microsoft .NET framework 2.0 or later</td>
</tr>
</tbody>
</table>

---

**NOTE**

- To install UIE/PC, you must have Administrator access. To run UIE/PC, you must have PowerUser (or higher) privileges.

- Only install Microsoft Data Access Components if the UIE/PC setup program tells you to do so. The UIE/PC installation wizard should be executed first.

---

# Detecting the Microsoft Windows Firewall

During the installation process, UIE/PC detects the existence of the Microsoft Windows Firewall (MSFW) automatically. A dialog is displayed that asks if you want the installation process to configure the firewall automatically (Figure 18 on page 61).
Figure 18  Detecting the Microsoft Windows Firewall

If you respond **Yes**, the installation process adds all necessary entries to the firewall.

If you respond **No**, refer to *BMC Performance Predictor for Mainframes Getting Started* for a description of the firewall settings. You must enter the settings manually.

---

**NOTE**

The installation process detects only the Microsoft Windows Firewall (MSFW). If you are using a firewall other than MSFW (such as Norton, Tiny, or McAfee), the installation process will not detect your firewall. Refer to *BMC Performance Predictor for Mainframes Getting Started* for a description of the firewall settings, which you must enter manually.

Use the following settings for UIE/PC:

**Applications:**

MVPA UIEPC—<path>\UIEPC.EXE

**Ports:**

<None>

When uninstalling UIE/PC, the process automatically removes the Microsoft Windows Firewall entries. If you are using a firewall other than MSFW (such as Norton, Tiny, or McAfee), the installation process does not remove your firewall. Refer to *BMC Performance Predictor for Mainframes Getting Started* for a description of the firewall settings, which you must remove manually.
Installation steps

This section explains how to install UIE/PC and, if necessary, the Microsoft Data Access Components.

Installing UIE/PC

1. On your installation media, click the `UIEPC\UIEPC.exe` program.
2. On the Installation Setup panel, click Next.
3. Read the license agreement and click Yes to accept the agreement and continue with the installation.
4. Review the Readme file, and then click Next.

   The UIE/PC Readme provides useful information about the product and supersedes information found in this book and other books. BMC recommends that you view the Readme text before continuing.

5. On the Console Location page, click Next to accept the default location or Browse to choose a different location.

   This location identifies the folder where you want to install UIE/PC product files. The default destination folder is `C:\Program Files\PASM\UIEPC`.

6. On the Database Location page, click Next to accept the default location or Browse to choose a different location.

   This location identifies the folder where you want to store baselines, studies, scenarios, and other data. The default destination folder is `C:\Program Files\PASM\UIEPC\Database`.

   **NOTE**

- If you are reinstalling the product, Setup uses the same folders as the current installation and overwrites the existing files.
- If you want to share data among several analysts, specify a database location on a server that is available to all analysts.
7 On the Start Copying Files page, review the list of files that will be copied and click Next to begin the copying process.

After the files are installed, a status message is displayed to indicate the Setup program is updating your registry.

---

**NOTE**
You can cancel the installation by clicking Cancel during the installation process. You still have the option to run the Setup program at a later time.

---

8 *(optional)* To create a product shortcut on your desktop, click Yes in the Question dialog.

9 If Setup is unable to override certain system files, you might have to restart your computer at this point.

   If you are prompted to restart your computer, perform one of the following tasks:

   - Remove any disks from their drives, and click Finish to restart your computer now.
   - Select No, and then click Finish to restart your computer later.

---

**NOTE**
If you are not required to restart your computer, Setup starts UIE/PC automatically.

---

10 *(optional)* If Setup tells you to, install the Microsoft Data Access Components as described in, “Installing Microsoft Data Access Components.”

### Installing Microsoft Data Access Components

1 Click the executable setup file for Microsoft Data Access Components version 2.6 or later.

2 Read the license agreement, click the acceptance box at the bottom of the page, and click Next to continue with the installation.

   The setup program checks your system for disk space and any previously installed product files.
3 When the installation page is displayed, click **Finish** to start the installation.

A progress box is displayed to track the file copying process. When the file copy is complete, the Control Panel is set up for the product.

4 When the Control Panel is set up, click **Finish**.

5 When the completion page is displayed, click **Close**.
Installing UIE/VM

This chapter describes the process for installing Universal Information Exchange/VM (UIE/VM).

Overview of the installation process

To install the product files, perform the following steps:

1. Review the requirements for installing and running UIE/VM.
2. Obtain the product files, either electronically or from an installation tape.
3. Create the required Product Control File.
4. Verify the installation by using the UIEVM command to invoke UIE/VM.

**NOTE**

Before you can use the product, UIE/VM requires that you run the VM Monitor to collect specific VM Monitor records. For details on running the VM Monitor, see the *Universal Information Exchange/VM User Guide*. 
System requirements

Before you attempt to install UIE/VM, make sure that your site meets the following requirements.

**WARNING**
Always load UIE/VM to a different minidisk than the disk where the previous release is stored. Always install a new version to a clean minidisk to avoid the possibility of code mismatch.

Software requirements

The software requirements for running UIE/VM are as follows:

- CMS version 5 or later.
- LE version 1.8 or later.

**NOTE**
The version of LE distributed with z/VM V4R2 or later is sufficient.

If you intend to use UIE/VM to generate XML models and push them to a PC, you must first install the BMC Performance Predictor for Mainframes component on the receiving PC.

If you intend to use UIE/VM to generate Visualizer files, you must install and use Visualizer to load those files and view the associated reports and graphs.

Memory and disk space requirements

UIE/VM requires

- 256 MB of memory
- 20 cylinders, or 3000 blocks, of 3380 disk space to install the product

Additional space is required to hold work files and output files. The space requirements depend on the volume of data processed. Initially, BMC recommends that you allocate 100 cylinders for this purpose and then adjust the amount according to your specific needs.
Obtaining the product files

This section describes how to obtain the UIE/VM product files, either electronically or from an installation tape.

Downloading the files electronically

This section describes how to download the UIE/VM product files from the BMC Electronic Product Distribution (EPD) facility. You can navigate to the EPD page from the Customer Support website at http://www.bmc.com/support.

To download the UIE/VM product files

1. From the EPD site, download the `bmcmvp-v1900-uiervm.bin` image file.

   If you choose to transfer the files by using FTP from a VM system, use the following commands:

   ```
   type i
   locsite f 80
   get bmcmvp-v1900-uiervm.bin uiervm.vmarc.a
   ```

2. Use the VMARC utility to expand the downloaded files into the UIE/VM product data sets.

   For example, if you downloaded `bmcmvp-v1900-uiervm.bin` into VM file `UIEVM VMARC A`, and you want to install UIE/VM on your B disk, enter this command:

   ```
   VMARC UNPK UIEVM VMARC A * * B
   ```

UIE/VM is now ready to use. You can invoke UIE/VM by entering the following command:

UIEVM
Loading the files from tape

Before loading the files on the UIE/VM installation tape, be sure that you have initialized and formatted the minidisks where you want to place the files. BMC recommends that the minidisks be formatted with a block size of 4K.

To load the UIE/VM product files from tape

1 Attach a tape drive to your virtual machine at address 181.

2 Type the following command:

   VMFPLC2 LOAD * * [filemode]

   where [filemode] is the file mode of the minidisk to receive the files. This disk must have read/write access. The default is your A–disk.

3 Press Enter.

UIE/VM is now ready to use. You can invoke UIE/VM by entering the following command:

UIEVM

NOTE

If you need to reinstall, be sure to clean off the minidisk, rewind the tape, and invoke the VMFPLC2 command again so that you get all the installation product files from the first file on the tape.

Setting up the Product Control File for UIE/VM

Please observe the following requirements when you set up the Product Control File for UIE/VM:

- You must name your Product Control File BGS CONTROL. The file must contain no sequence numbers and must be RECFM F and LRECL 80.

- UIE/VM uses the same product control file as the one used on the z/OS side. In the z/OS BMC Capacity Management for Mainframes installation, the control file is installed as hiqual.usermid.CONTROL. You can FTP this data set or copy it to the VM system exactly as it appears on z/OS, that is, the codes are the same, and you can place it on the UIE/VM product disk as BGS CONTROL.
Installation error messages

This chapter explains the error and interactive messages produced by the Online Installation Facility. Also included are messages produced during execution of the software products in the BMC Capacity Management for Mainframes products, which might be related to errors that occurred during product installation.

Online Installation Facility related messages

This section explains the error and interactive messages produced by the Online Installation Facility. You might encounter these messages during execution of the installation JCL used to install the BMC products, either in batch or interactively.

The first section lists the batch error messages you might encounter in the SYSOUT listing. The second section lists the interactive messages for which a Help facility is available by pressing F1. Each section lists the message followed by an explanation of the likely problem and a suggested solution.

SYSOUT listing error messages

CVB0010E: DYNAMIC FILE ALLOCATION FAILED. DSN: data set name MEMBER: member name

Explanation: The CLIST FB to VB conversion program attempted to process a member of the input FB CLIST library data set, but was unable to access that data set. The data set and member name in question are identified in the error message. Check that the identified data set and member exist, are not empty, and have the proper DCB characteristics. Also check that no one is accessing or is attempting to access the identified data set at the time the conversion program is run.
CVB0011E: DYNAMIC FILE ALLOCATION FAILED. DSN: *data set name* MEMBER: *member name*

*Explanation:* The CLIST FB to VB conversion program attempted to process a member of the output VB CLIST library data set, but was unable to access that data set. The data set and member name in question are identified in the error message. Verify that the identified data set and member exist, are not empty, and have the proper DCB characteristics. Also verify that no one is accessing or attempting to access the identified data set at the time the conversion program is run.

TLR001E: DDNAME UNLDJCL POINTS TO UNTAILORED INSTALLATION JCL. IT SHOULD POINT TO TAILORED INSTALLATION JCL

*Explanation:* The parameter UNLDJCL in the installation UNLOAD JCL must indicate the output data set name of the tailored installation JCL. If this JCL is a member of a PDS, the member name must also be specified. Be sure to save and exit PF3 from the JCL data set before, or immediately after you submit the job.

TLR002E: PARAMETER *parm* NOT FOUND

*Explanation:* The parameter *parm* in the installation JCL was not assigned a value. It should be tailored to provide an appropriate value. Review the assignment of the identified parameter in the UNLOAD JOB.

TLR004E: DYNAMIC FILE ALLOCATION FAILED. DSN: *data set name* MEMBER: *member name*

*Explanation:* The Online Installation Facility attempted to tailor a data set, but was unable to access that data set. The data set name and member name (if it is a PDS) in question are identified in the error message. Verify that the identified data set exists, is not empty, and has the proper DCB characteristics.

TLR0015E: TRANSMIT CONDITION ON DDNAME UNLDJCL. IF THE TAILORED JCL IS A PDS MEMBER, CHECK THAT THE UNLDJCL PARAMETER POINTS TO THE SPECIFIC MEMBER.

*Explanation:* The Online Installation Facility attempted to read the tailored installation JCL, but was unsuccessful. The most likely cause is that this JCL is in a member of a partitioned data set and the UNLDJCL parameter in the installation JCL was set up to point to just the data set and not the specific member. For example, if your installation JCL is in member UNLOAD of data set *my.unld.job*, you must set UNLDJCL=*my.unld.job*(UNLOAD) rather than UNLDJCL=*my.unld.job* to avoid this error.

TLR0022E: INVALID MVS TYPE SPECIFICATION. IT MUST BE SP, XA, ESA OR z/OS

*Explanation:* The parameter MVS in the installation JCL was tailored incorrectly. It should be tailored to either SP (for SP systems), XA (for XA systems), ESA (for ESA systems), or z/OS (for z/OS systems). Note that this parameter indicates the type of system on which MAINVIEW Predict ISPF: Datacenter will be run, not the type of data that it will process.
Interactive messages

TLR0030E: HIQUAL PARAMETER NOT FOUND

Explanation: The installation JCL is missing the required parameter hiqual. Select Option 1 from the Online Installation Facility Main Menu to set the hiqual parameter for the installation JCL.

TLR0031E: MIDQUAL PARAMETER NOT FOUND

Explanation: The installation JCL is missing the required parameter midqual. Select Option 1 from the Online Installation Facility Main Menu to set the midqual parameter for the installation JCL.

TLR0032E: USERMID PARAMETER NOT FOUND

Explanation: The installation JCL is missing the required parameter usermid. Select Option 1 from the Online Installation Facility Main Menu to set the usermid parameter for the installation JCL.

UPP0010E: DYNAMIC FILE ALLOCATION FAILED. DSN: data set name, MEMBER: member name

Explanation: The uppercase conversion program attempted to process a member of the input FB CLIST library data set, but was unable to access that data set. The data set and member name in question are identified in the error message. Verify that the identified data set and member exist, are not empty, and have the proper DCB characteristics. Also verify that no one is accessing or attempting to access the identified data set at the time the upper case conversion program is run.

Interactive messages

UNLD000E: You must specify a tape unit name

Explanation: You must specify a tape unit name in order to unload the tape containing BMC products.

UNLD001E: You must specify the tape volume serial number (VOLSER)

Explanation: You must specify the volume serial number of the tape containing BMC products. There is a default tape volume serial number provided, but if you mistakenly delete it, you can look at the label on the tape itself to get the volume serial number.

UNLD002E: USERMID and MIDQUAL fields cannot be the same

Explanation: The value that you specify for user midqual must be different from the value that you specify for the BMC product data set midqual.
UNLD003E: You must specify a volume serial # for output data sets

Explanation: You must specify the disk volume serial number that you want to use for BMC product data sets.

UNLD004E: Invalid SYSOUT class

Explanation: You must specify a valid SYSOUT class (such as A or *) for use by BMC batch jobs.

UNLD005E: Please fill in JOBCARD information

Explanation: You must specify valid JOBCARD information in order to submit BMC batch jobs.

UNLD006E: Command not supported: command-name

Explanation: You specified a command which is not recognized by the Online Installation Facility.

UNLD007E: Valid values for this field are ON and OFF

Explanation: ON and OFF are the only acceptable values for the specified field.

UNLD008E: Data set HIQUAL.MIDQUAL.CNTL not found

Explanation: You have incorrectly specified the HIQUAL and/or MIDQUAL parameters when invoking the Online Installation Facility. You must unload the first file from the BMC tape to a data set named hiqual.midqual.CNTL, where hiqual and midqual are data set name qualifiers that you select. You then invoke the Online Installation Facility by entering an ISPF environment and entering the command:

TSO EX 'hiqual.midqual.CNTL(BMCUNLD) HIUNLD(hiqual) MIDUNLD(midqual)'

UNLD009E: HIQUAL + MIDQUAL cannot = BMC.PASM.midqual. Change MIDQUAL

Explanation: This combination of HIQUAL and MIDQUAL exists on the product distribution tape. Using this combination causes a JCL error when attempting to unload products from the tape. From Option 1: Data Set Parameters, you can either:

- Change the name of your midqual field
- Change the name of your hiqual field

UNLD010E: Quotes invalid in HIQUAL field

Explanation: You cannot use quotes in the hiqual field. This field is used to create data set names for BMC product data sets.
UNLD011E: Quotes invalid in MIDQUAL field

Explanation: You cannot use quotes in the midqual field. This field is used to create data set names for BMC product data sets.

UNLD012E: You must specify a value for USERPRF

Explanation: You must specify a value for the userprf field. This field is used to create data set names for data sets created by BMC products.

UNLD013E: USERMID field cannot begin with an "&"

Explanation: You must specify a value for the USERMID field that does not begin with the ampersand character (&). This field is used to create data set names for data sets created by BMC products.

UNLD014E: Valid values are ESA, XA, or SP

Explanation: You must specify the type of system on which you are running the products. This is the type of system running the products, not the type of data you are processing.

UNLD015E: Valid values are YES or NO

Explanation: YES or NO are the only valid values for the specified field.

UNLD016E: This field is required

Explanation: You must specify a value for the field identified by the cursor. You cannot leave it blank.

UNLD017E: You must specify either FB or VB

Explanation: The BMC CLIST library can be created as either an FB (fixed block) or VB (variable block) data set. This data set will be allocated to SYSPROC, so you should choose the record format (FB or VB) that you normally use for data sets allocated to SYSPROC.

UNLD018E: You must specify a valid data set name

Explanation: The data set name that you specified in the indicated field is invalid.

UNLD019E: Data set does not exist

Explanation: The data set name that you specified in the indicated field does not exist. The option you have selected, however, requires that the specified data set already exist. Verify to see if you have skipped the step that would have created the desired data set.
UNLD020E: Change **HIQUAL** or **MIDQUAL** when changing UNIT or VOLSER

*Explanation:* To auto-tailor an existing installation, you must change *hiqual* or *midqual* (Option 1) if you change the production disk unit or VOLSER (Option 0).

UNLD021E: Control File does not exist or is in use by another user

*Explanation:* You cannot browse or edit a control file until you have created it. Use panels 2.1 and 2.2 to create a control file, or use option 2.5 to create a current control file from an old control file. Also you cannot create, edit, or overwrite a control file if another user is using that control file.

UNLD022I: **oldcntl** has been copied to **newcntl**

*Explanation:* You requested that the current control file be created from an old control file. This message indicates that the operation has been successfully performed.

UNLD023E: You must pass the name of **HIQUAL** when executing this CLIST

*Explanation:* When invoking the Online Installation Facility, you must set the *hiunld* parameter to the value that you assigned to *hiqual*.

UNLD024E: This field can only contain numeric characters

*Explanation:* You entered a non-numeric character into a field that can contain only numeric characters (0123456789). Enter numeric characters in this field.

UNLD025E: Option requires **HIQUAL** & **MIDQUAL** be specified in option 1

*Explanation:* You have requested an option that requires the use of the *hiqual* and *midqual* fields in panel 1, but those fields are currently blank. Go to panel 1, enter values for those fields, and try again.

UNLD026E: Valid values for this field are **Y** and **N**

*Explanation:* Y or N are the only acceptable valid values for this field.

UNLD027E: Unable to copy data set unavailable

*Explanation:* You attempted to copy an existing Product Control File into another data set. Access to the existing Product Control File is unavailable. A possible cause is that another user is editing or otherwise has exclusive access to that existing Product Control File.
UNLD028E: Unable to copy data set unavailable

*Explanation:* You attempted to copy an existing Product Control File into a second data set. Exclusive access to that second data set is required for this function, but is unavailable. A possible cause is that another user is currently accessing that data set.

UNLD029E: Valid values are S and blank

*Explanation:* Enter an *S* in the field to select the associated product for installing. If you leave the field blank, the product is not installed.

UNLD031E: Unable to browse data set unavailable

*Explanation:* You attempted to browse a data set, but that data set is unavailable (for instance, another user has obtained exclusive access to that data set).

UNLD032E: Unable to browse data set not found

*Explanation:* You attempted to browse a data set that does not exist. You might have skipped a prior step that would have created the desired data set.

UNLD033E: Unable to browse data set member not found

*Explanation:* You attempted to browse a member of a data set that does not exist. You might have omitted a prior step that would have created the needed member.

UNLD034E: Unable to edit data set unavailable

*Explanation:* You attempted to edit a data set that does not exist. You might have skipped a prior step that would have created the desired data set.

UNLD035E: Unable to edit data set not found

*Explanation:* You attempted to edit a data set, but that data set is unavailable (for instance, another user has obtained exclusive access to that data set).

UNLD036E: Unable to edit data set member not found

*Explanation:* You attempted to edit a member of a data set that does not exist. You might have omitted a prior step that would have created the needed member.

UNLD037E: Unable to create data set already exists

*Explanation:* You attempted to create a data set that already exists. Delete the identified data set, and try again.
UNLD038E: Data set allocation error

Explanation: A severe error was encountered when attempting to allocate a data set. Review the data sets associated with the function that you attempted to perform. Verify DCB characteristics, available space and extents, availability of the disk packs that the data sets are on, usage of those data sets by other users, and any other unusual situation that could apply to those data sets.

UNLD039E: Unable to update control file not available

Explanation: You attempted to update the site or product information in the Product Control File, but the Product Control File was unavailable. Exclusive access to the Product Control File is required for this function. A possible cause of the problem was that another user was currently accessing the Product Control File.

UNLD040E: Error allocating hiqual.midqual.CNTL(UNLOAD). Compress or reallocate

Explanation: There was an error while building the JCL job stream due to data set allocation/utilization. Exit the online installation facility and check the utilization. Compress or reallocate the data set to the TAPEREAD Job specification given in “Unloading the Installation Library from tape” on page 26.

UNLD041E: Control file must exist and contain a valid product code.

Explanation: Before you can build the job that unloads the distribution tape, you must first create your product control file. Your product control file must contain valid product entries as specified in the product control letter provided by BMC.

UNLD050I: Your UNLOAD JCL Job Stream has been submitted

Explanation: The job stream built by the Online Installation Facility has been submitted for processing. When the job completes successfully, you can proceed to product-specific tailoring and product invocation.

UNLD051E: LE/370 was specified, but is not supported for this product

Explanation: You indicated that you are using LE/370, but you selected a product that does not support LE/370. The cursor is positioned at the product selection in question. If you must use LE/370, do not select the identified product.

UNLD052E: Valid values are Y (for Yes) and N (for No)

Explanation: When specifying whether the installed products should be run using the LE/370 libraries, you must answer either Y (for Yes) or N (for No).
UNLD053E: Valid values are 6 (SAS version 6) or 8 (SAS version 8)

Explanation: If you install CAPTURE for MXG/MICS, you must specify whether the products should run using SAS version 6 or SAS version 8.

Installation related messages

This section describes messages, produced during execution of the BMC Capacity Management for Mainframes products, which might be related to errors that occurred during product installation.

Each message is listed followed by an explanation of the likely problem and a suggested solution. Messages are grouped by product.

BES0001E: Not enough contiguous memory to load HMC

Explanation: Not enough memory is available to load the BMC Capacity Management for Mainframes load module. The lack of available memory is probably due to one of the following:

- Too small a region at log on.
- Other products were loaded into memory before BMC Capacity Management for Mainframes and did not leave enough available memory.
- You specified a larger than intended load module (such as XLARGE instead of LARGE).

The simplest way to handle this problem is to log on with a larger TSO region size. For example, type: LOGON yourid s(6000). See Chapter 2, “System requirements for product installation” for specific product memory requirements.

Alternatively, you can try ending any split sessions or restarting ISPF.

BES0006E: ERROR in ALLOCATING: xxx

Explanation: Several data sets must be allocated for BMC products to run. This problem arises when a CLIST cannot allocate one of the data sets specified in Customization Section 1 of the CLIST.

User response: Make sure that the data set name associated with the error message has been specified correctly and refers to an existing data set. Determine this by typing either of the following:
Installation related messages

- From an ISPF command line

  TSO LISTDS 'fully.qualified.dsname'

- From native TSO

  LISTDS 'fully.qualified.dsname'

In response, TSO provides the current status of this data set. If the data set is not found, unload the data set from tape and try again.

**BES9003E: INVALID ALLOCATION DDNAME ALREADY ALLOCATED**

*Explanation:* This problem arises when BMC Capacity Management for Mainframes is unable to allocate a data set most likely the LOGFILE.

*User response:* Make sure to use the current B1 CLIST to run the product.

If you are using the current B1 CLIST, then you need to determine whether there are any conflicting allocations.

Type the following command on an ISPF command line:

```
TSO LISTA ST HIS
```

TSO describes your current file allocations. Make sure you have no potential conflicts by eliminating any noncritical allocations.

**BGS0009E: CACHEC ERROR IN aaa ALLOCATIONS. EXECUTE THE CACHEC CLIST USING THE DEBUG OPTION TO DETERMINE THE CAUSE. IN ADDITION, CHECK MEMBER mmm OF THE CLIST LIBRARY hiqual.midqual.CLIST FOR CORRECT SYNTAX AND DATA SET NAME SPECIFICATIONS**

*Explanation:* An allocation error has occurred. The string aaa identifies whether the error is an ISPF or CLIST allocation. The string mmm identifies a member in the CLIST library. The string `hiqual.midqual.CLIST` identifies the CLIST library.

If the error is in the ISPF allocations, most likely the offending allocation statement is in the BGSINIT CLIST. If the error is in the CLIST allocations, most likely the offending allocation statement is in the BGSPROC CLIST.

*User response:* To obtain more information on the location and nature of the error, run the CACHEC CLIST in DEBUG mode. See “Special parameters for product invocation CLISTs” on page 44 for information regarding the DEBUG option.

Make sure that the data set name associated with the allocation error has been specified correctly and that the data set has the appropriate attributes.
Problem Unknown B1MVSGP fails with no messages

*Explanation:* If, for any reason, B1MVSGP fails, and there are no informative messages, run it again with the debug parameter DRIVER. All of the TSO lists and messages will be displayed at your terminal, and in all probability, the difficulty will become apparent. The most likely possibilities are:

- An error in one of the concatenation lists
- Failure in a dynamic allocation
- Failure to allocate the errors file
- Deletion of a continuation character

*User response:* Run B1MVSGP with the DEBUG(DRIVER) parameter. Note and correct all errors.

New variable values not initialized

*Explanation:* You have changed the values for parameters in Customization Section 1, but in the BMC Capacity Management for Mainframes menu, those values are not initialized. For example, you are pointing to a previous version, even though the current version is installed.

*User response:* Try the following:

- Check values in Customization Section 1.
- If you are using ISR@PRIM, make sure that it contains the correct syntax for this release; see Chapter 5, “Choosing an invocation method” for the correct syntax.
- Eliminate previous versions of the BMC Capacity Management for Mainframes menu from the current concatenation lists.

FILE filename NOT FREED, DATASET IS OPEN

*User response:* If a data set is open, z/OS will not allow it to be freed. This might be confusing because the message can arise before the product is even invoked. The probable area of concern is LIBDEFs. The effect of the LIBDEF function is that new ISPF libraries can be dynamically associated with an already allocated ISPF DDName. Once the link is made, even before the product is called, the new (temporary) DDName cannot be freed.

*User response:* A LIBDEF must be issued first to break the link between the ISPF DDName and the corresponding temporary DDName associated with BMC Capacity Management for Mainframes. Then, issue a FREE statement and the temporary DDName will be freed. Verify the area of CLIST code that handles the LIBDEFs has not been altered.
**FILE filename NOT UNALLOCATED, DATA SET IS OPEN**

Explanation: When running the MVUIE CLIST, this message could occur if an ISPF library has been allocated using the LIBDEF utility, and has not been freed before this attempt.

User response: ALIBDEF must be issued first to break the link between the ISPF DDname and the corresponding temporary DDname associated with BMC Capacity Management for Mainframes. Then, issue a FREE statement and the temporary DDname will be freed. Verify that the area of CLIST code that handles the LIBDEFs has not been altered.

**Concatenation problems for SYSPROC**

Explanation: Some of the allocation problems that could occur with SYSPROC (CLIST libraries) are:

- TSO displays the following message –

  'DATA SETS NOT CONCATENATED. COMBINING UNLIKE DATA SET ORGANIZATIONS IS INVALID.'

- B1 member not found.

User response: When allocating CLISTS, there are two critical rules to follow:

- Never try to mix record formats, such as trying to concatenate VB and FB data sets.

- If the data sets have different block sizes, you must concatenate them with the largest block size first. Since BMC recommends that a BMC CLIST be placed first in the concatenation list, be sure that its block size is at least equal to the largest block size in the list.
Product Control File

This chapter describes the contents of the Product Control File and the Product Control letter. Also included are any error messages you might see as you start to run your product.

The Product Control File

File contents

The Product Control File contains product control information that is supplied by BMC, as a part of your licensing agreement, for each BMC product. The file contains five header lines, plus one additional line for each BMC product that you have acquired. Your four-digit customer number appears on the fifth line.

Product Control Letter

The product control information is supplied in a Product Control Letter, which is packaged as a separate document. It might be included in your installation package or be distributed separately. See Table 13 on page 35 for more information.

File setup

Use Option 2 (Create/Modify/View BMC Control File) on the Online Installation Facility Main Menu to set up your Product Control File.

New customers must create a new Product Control File and enter into it the information supplied in the Product Control Letter.

Current customers who receive an updated Product Control Letter must update their current Product Control File, as indicated in the letter.
Current customers who do not receive an updated Product Control Letter can continue to use their current Product Control File without changing it.

You must name your Product Control File using the hiqual and usermid parameters, as described in “Using the Online Installation Facility” on page 29. You might also have to rename your old Product Control File. The Product Control File must be a sequential file.

**NOTE**

For Universal Information Exchange/VM, you must name your product control file BGS CONTROL. The file must contain no sequence numbers and must be RECFM F and LRECL 80.

**Error Messages**

If, for any reason, the Product Control File information for a BMC product is incorrect when you attempt to run it, the following occurs:

- One or more error messages are displayed.
- The product is not invoked.

A list and description of the error messages follows.

---

### Product Control File error messages

**BSR0001S: COMPANY NAME DOES NOT MATCH SECURITY CODE**

*Explanation:* The decoded company name in your BMC control file does not match the coded company name in your BMC control file. Please check that the information provided in your Product Software Control Letter has been entered, exactly as specified, into your BMC control file.

**BSR0002S: COMPANY LOCATION DOES NOT MATCH SECURITY CODE**

*Explanation:* The decoded company location in your BMC control file does not match the coded company location in your BMC control file. Please check that the information provided in your Product Control Letter has been entered, exactly as specified, into your BMC control file.

**BSR0004S: PRODUCT CODE prodcode AND DATE DO NOT MATCH SECURITY CODE**

*Explanation:* The product code specified in the error message does not match the corresponding date and product information. Please check that the information provided in your Product Control Letter has been entered, exactly as specified, into your BMC control file.
BSR0005S: PRODUCT LICENSE HAS EXPIRED FOR prodcode

Explanation: Your license for the product specified in the error message has expired. Contact BMC Customer Support.

BSR0006S: PRODUCT prodcode IS NOT IN PRODUCT CONTROL FILE

Explanation: Your BMC control file does not contain an entry for the product specified in the error message. Verify that the information provided in your Product Control Letter has been entered, exactly as specified, into your BMC control file.

BSR0007S: PRODUCT CONTROL FILE IS INCOMPLETE

Explanation: Your BMC control file is not complete. Please check that all of the information provided in your product control letter has been entered, exactly as specified, into your BMC control file.

BSR0008S: THE DDNAME BGSCNTL WAS NOT FOUND

Explanation: The DDNAME BGSCNTL was not found. The DDNAME should be associated with your BMC Product Control File. Please check your JCL, CLIST, or PROC to ensure that BGSCNTL has been properly defined to point to your BMC Product Control File.

BSR0009S: BGSCNTL SHOULD POINT TO SEQUENTIAL DATA SET

Explanation: The DDNAME BGSCNTL is pointing to a PDS instead of a sequential data set.

BSR0010W: PRODUCT prodcode WILL CEASE OPERATING IN nn DAYS

Explanation: The product specified in the error message is nearing its expiration date, at which time it will no longer operate. The value nn in this message displays the number of days left before product operation will terminate. The BMC Product Control program begins to display this message 60 days before the termination date.
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