Note

Before using this information and the product it supports, be sure to read the general information under 8.0, "Notices" on page 32.
18. SMP/E Options Subentry Values ...................................................... 19
19. Sample Installation Jobs ................................................................. 20
1.0 Introduction

This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of IBM Db2 Analytics Accelerator for z/OS. This publication refers to IBM Db2 Analytics Accelerator for z/OS as Db2 Analytics Accelerator.

The Program Directory contains the following sections:

- **2.0, “Program Materials” on page 4** identifies the basic program materials and documentation for Db2 Analytics Accelerator.
- **3.0, “Program Support” on page 8** describes the IBM support available for Db2 Analytics Accelerator.
- **4.0, “Program and Service Level Information” on page 10** lists the APARs (program level) and PTFs (service level) that have been incorporated into Db2 Analytics Accelerator.
- **5.0, “Installation Requirements and Considerations” on page 11** identifies the resources and considerations that are required for installing and using Db2 Analytics Accelerator.
- **6.0, “Installation Instructions” on page 19** provides detailed installation instructions for Db2 Analytics Accelerator. It also describes the procedures for activating the functions of Db2 Analytics Accelerator, or refers to appropriate publications.

For most recent information on prerequisites and installation information for Db2 Analytics Accelerator please check the document "IBM Prerequisites and Maintenance for IBM Analytics Accelerator for z/OS, Version 7.1" on the IBM Support Portal at HYPERLINK: http://www.ibm.com/support/docview.wss?uid=swg27050161

Before installing Db2 Analytics Accelerator, read the CBPDO Memo To Users and the CBPDO Memo To Users Extension that are supplied with this program in softcopy format and this program directory; then keep them for future reference. Section **3.2, “Preventive Service Planning” on page 8** tells you how to find any updates to the information and procedures in this program directory.

Db2 Analytics Accelerator is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The program directory that is provided in softcopy format on the CBPDO tape is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for Db2 Analytics Accelerator are included on the CBPDO tape.

Do not use this program directory if you install Db2 Analytics Accelerator with a SystemPac or ServerPac. When you use one of those offerings, use the jobs and documentation supplied with the offering. The offering will point you to specific sections of this program directory as needed.
1.1 Db2 Analytics Accelerator Description

IBM Db2 Analytics Accelerator for z/OS complements Db2 for z/OS, which is built for transactional workloads. The Accelerator provides a cost-effective, high-speed query engine to run business-critical reporting and complex analytics workload. As part of its unique design, the Db2 Analytics Accelerator includes breakthrough technologies to route queries that are typically found in transactional workloads to Db2 for z/OS and queries that are typically found in analytics applications to an integrated analytical processing environment. This combination transforms the mainframe into a highly efficient, hybrid transaction and analytic processing (HTAP) environment. This drives out cost and complexity and enables real-time analytics on transactional data as it is generated. With the Db2 Analytics Accelerator, organizations can leverage business-critical data where it originates to integrate real-time insight with real-time operational decisions.

IBM Db2 Analytics Accelerator for z/OS, V7.1 delivers two new deployment options on either the recently announced IBM Integrated Analytics System or directly on the new IBM Z mainframe. Both of these deployment options are based on the premier IBM analytical engine, Db2 Warehouse software. This guarantees a uniform experience that allows you to invest once to enable your applications and workloads for the Accelerator and then to transition easily between deployment options.

IBM Db2 Analytics Accelerator for z/OS, V7.1
- Supports the newly announced IBM Integrated Analytics System:
  - A pre-configured offering that includes hardware (compute, storage, and networking) and software for easy deployment, management, and high performance.
  - Secure, flexible and elastic data storage that is both easy to deploy and easy to manage.

- Supports the newly announced IBM Z mainframe, within Integrated Facility for Linux (IFL) processors, and without the need to attach a separate appliance. This Accelerator on IBM Z deployment option allows for:
  - Deeper integration with the IBM Z infrastructure. This offers a unified homogeneity of service, support and operations and deeper integration with operational processes, for example, for disaster recovery.
  - Flexible capacity to respond to peak analytic workload requirements while meeting SLAs.

- Allows you to start with an Accelerator environment deployed on IBM Z and seamlessly grow into a larger IBM Integrated Analytics System deployment, as needed.
1.2 Db2 Analytics Accelerator FMIDs

Db2 Analytics Accelerator consists of the following FMIDs:

- HAQT710 - Db2 Analytics Accelerator
- JAQT711 - Analytics Accelerator on IBM Integrated Analytics System
- JAQT712 - Analytics Accelerator on IBM Z
- HCHCA21 - InfoSphere Data Replication

Note

The IBM Db2 Analytics Accelerator on IBM Integrated Analytics System feature consists of the following FMIDs:

- HAQT710 - Db2 Analytics Accelerator
- JAQT711 - Analytics Accelerator on IBM Integrated Analytics System
- HCHCA21 - InfoSphere Data Replication

The IBM Db2 Analytics Accelerator on IBM Z feature consists of the following FMIDs:

- HAQT710 - Db2 Analytics Accelerator
- JAQT712 - Analytics Accelerator on IBM Z
- HCHCA21 - InfoSphere Data Replication
### 2.0 Program Materials

An IBM program is identified by a program number. The program number for Db2 Analytics Accelerator is 5697-DA7.

Basic Machine-Readable Materials are materials that are supplied under the base license and are required for the use of the product.

The program announcement material describes the features supported by Db2 Analytics Accelerator. Ask your IBM representative for this information if you have not already received a copy.

### 2.1 Basic Machine-Readable Material

The distribution medium for this program is physical media or downloadable files. This program is in SMP/E RELFILE format and is installed by using SMP/E. See 6.0, “Installation Instructions” on page 19 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for Db2 Analytics Accelerator in the *CBPDO Memo To Users Extension*.

Figure 1 describes the program file content for Db2 Analytics Accelerator. Figure 4 on page 5 describes the program file content for InfoSphere Data Replication. You can refer to the *CBPDO Memo To Users Extension* to see where the files reside on the tape.

**Notes:**

1. The data set attributes in this table must be used in the JCL of jobs that read the data sets. However, because the data sets are in IEBCOPY unloaded format, their actual attributes might be different.

2. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

```plaintext
<table>
<thead>
<tr>
<th>Name</th>
<th>O</th>
<th>R</th>
<th>L</th>
<th>BLOCK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMPMCS</td>
<td>SEQ</td>
<td>FB</td>
<td>80</td>
<td>6400</td>
</tr>
<tr>
<td>IBM.HAQT710.F1</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HAQT710.F2</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HAQT710.F3</td>
<td>PDSE</td>
<td>VB</td>
<td>1028</td>
<td>6144</td>
</tr>
<tr>
<td>IBM.HAQT710.F4</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>6144</td>
</tr>
<tr>
<td>IBM.HAQT710.F5</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>6144</td>
</tr>
</tbody>
</table>
```
### Figure 1. Program File Content for Db2 Analytics Accelerator

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Mode</th>
<th>REC</th>
<th>ERE</th>
<th>CLS</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
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<td>IBM.HAQT710.F7</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 2. Program File Content for Analytics Accelerator on IBM Integrated Analytics System

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Mode</th>
<th>REC</th>
<th>ERE</th>
<th>CLS</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMPMCS</td>
<td>SEQ</td>
<td>FB</td>
<td>80</td>
<td>6400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.JAQT711.F1</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>6144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.JAQT711.F2</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 3. Program File Content for Analytics Accelerator on IBM Z

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Mode</th>
<th>REC</th>
<th>ERE</th>
<th>CLS</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>FB</td>
<td>80</td>
<td>6400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.JAQT712.F1</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>6144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.JAQT712.F2</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 4. Program File Content for InfoSphere Data Replication

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Mode</th>
<th>REC</th>
<th>ERE</th>
<th>CLS</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>80</td>
<td>6400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.HCHCA21.F1</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.HCHCA21.F2</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>6144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM.HCHCA21.F3</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for Db2 Analytics Accelerator.

2.3 Program Publications

The following sections identify the basic publications for Db2 Analytics Accelerator.

Figure 5 identifies the basic unlicensed publications for Db2 Analytics Accelerator. Those that are in softcopy format publications can be obtained from the IBM Publications Center website at: http://www.ibm.com/shop/publications/order/

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Db2 Analytics Accelerator for z/OS License Information Agreement CD</td>
<td>LCD7-2646</td>
<td><a href="http://www.ibm.com/software/sla/sladb.nsf">http://www.ibm.com/software/sla/sladb.nsf</a></td>
</tr>
</tbody>
</table>

Figure 4 (Page 2 of 2). Program File Content for InfoSphere Data Replication

<table>
<thead>
<tr>
<th>Name</th>
<th>O RG</th>
<th>R E C FM</th>
<th>L RE CL</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM.HCHCA21.F4</td>
<td></td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HCHCA21.F5</td>
<td></td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HCHCA21.F6</td>
<td></td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HCHCA21.F7</td>
<td></td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HCHCA21.F8</td>
<td></td>
<td>VB</td>
<td>256</td>
<td>27998</td>
</tr>
<tr>
<td>IBM.HCHCA21.F9</td>
<td></td>
<td>VB</td>
<td>256</td>
<td>27998</td>
</tr>
<tr>
<td>IBM.HCHCA21.F10</td>
<td></td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HCHCA21.F11</td>
<td></td>
<td>VB</td>
<td>256</td>
<td>27998</td>
</tr>
<tr>
<td>IBM.HCHCA21.F12</td>
<td></td>
<td>VB</td>
<td>137</td>
<td>27998</td>
</tr>
<tr>
<td>IBM.HCHCA21.F13</td>
<td></td>
<td>VB</td>
<td>255</td>
<td>6475</td>
</tr>
</tbody>
</table>
2.3.1 Optional Program Publications

No optional publications are provided for Db2 Analytics Accelerator.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for Db2 Analytics Accelerator.

2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 6 during the installation of Db2 Analytics Accelerator.

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</td>
<td>GA32-0883</td>
<td><a href="http://www.ibm.com/shop/publications/order/">http://www.ibm.com/shop/publications/order/</a></td>
</tr>
</tbody>
</table>
3.0 Program Support

This section describes the IBM support available for Db2 Analytics Accelerator.

3.1 Program Services

Contact your IBM representative for specific information about available program services.

3.2 Preventive Service Planning

Before you install Db2 Analytics Accelerator, make sure that you have reviewed the current Preventive Service Planning (PSP) information. Review the PSP Bucket for General Information, Installation Documentation, and the Cross Product Dependencies sections. For the Recommended Service section, instead of reviewing the PSP Bucket, it is recommended you use the IBM.ProductInstall-RequiredService fix category in SMP/E to ensure you have all the recommended service installed. Use the FIXCAT(IBM.ProductInstall-RequiredService) operand on the APPLY CHECK command. See §6.1.12, “Perform SMP/E APPLY” on page 26 for a sample APPLY command.

If you obtained InfoSphere Data Replication for Db2 for z/OS, in a CBPDO, there is HOLDDATA AND PSP information for InfoSphere Data Replication for Db2 for z/OS on the CBPDO tape. However, before installing the InfoSphere Data Replication for Db2 for z/OS, you should also check with your IBM Support Center or use either Information/Access or IBMLink(ServiceLink) to see whether there is any additional Preventive Service Planning (PSP) information which you should be aware of. To obtain this information specify the UPGRADE and SUBSET values listed below, for the HCHCA21 FMID.

If you obtained the InfoSphere Data Replication for Db2 for z/OS individually from IBM Software Distribution, then, before installing the InfoSphere Data Replication for Db2 for z/OS you should also check with your IBM Support Center or use either Information/Access or IBMLink(ServiceLink) to see whether there is any additional PSP information which you should be aware of.

NOTE: The PSP SUBSET name reflects the Function Module Identifier (FMID) that was updated and the corresponding CBPDO weekly service tape that was used to supply the integrated PTFS. (Example; FMID/YYWW, where YY is the year and WW is the week of the CBPDO weekly service tape.).

The CBPDO weekly Service tape is the Service Level Indicator for any products updated by the Software Manufacturing Center (SMC) processes. If you wish to determine the latest level of PUT maintenance installed in this product, please refer to the ‘Program and Service Level Information’ section of this program directory.

If the CBPDO for Db2 Analytics Accelerator is older than two weeks by the time you install the product materials, you can obtain the latest PSP Bucket information by going to the following website:

You can also use S/390 SoftwareXcel or contact the IBM Support Center to obtain the latest PSP Bucket information.

For program support, access the Software Support Website at http://www-01.ibm.com/software/support/.

PSP Buckets are identified by UPGRADEs, which specify product levels; and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for Db2 Analytics Accelerator are included in Figure 7.

### Figure 7. PSP Upgrade and Subset ID

<table>
<thead>
<tr>
<th>UPGRADE</th>
<th>SUBSET</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5697DA7</td>
<td>HAQT710</td>
<td>Db2 Analytics Accelerator</td>
</tr>
<tr>
<td></td>
<td>JAQT711</td>
<td>Db2 Analytics Accelerator on IBM Integrated Analytics System</td>
</tr>
<tr>
<td></td>
<td>JAQT712</td>
<td>Db2 Analytics Accelerator on IBM Z</td>
</tr>
<tr>
<td>5655U96</td>
<td>HCHCA21/1642</td>
<td>InfoSphere Data Replication for Db2 for z/OS</td>
</tr>
</tbody>
</table>

#### 3.3 Statement of Support Procedures

Report any problems which you feel might be an error in the product materials to your IBM Support Center. You may be asked to gather and submit additional diagnostics to assist the IBM Support Center in their analysis.

Figure 8 identifies the component IDs (COMPID) for Db2 Analytics Accelerator.

### Figure 8. Component IDs

<table>
<thead>
<tr>
<th>FMID</th>
<th>COMPID</th>
<th>Component Name</th>
<th>RETAIN Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAQT710</td>
<td>5697DA700</td>
<td>Db2 Analytics Accelerator</td>
<td>710</td>
</tr>
<tr>
<td>JAQT711</td>
<td>5697DA700</td>
<td>Db2 Analytics Accelerator on IBM Integrated Analytics System</td>
<td>711</td>
</tr>
<tr>
<td>JAQT712</td>
<td>5697DA700</td>
<td>Db2 Analytics Accelerator on IBM Z</td>
<td>712</td>
</tr>
<tr>
<td>HCHCA21</td>
<td>5655U7600</td>
<td>InfoSphere Data Replication for Db2 for z/OS</td>
<td>A21</td>
</tr>
</tbody>
</table>
4.0 Program and Service Level Information

This section identifies the program and relevant service levels of Db2 Analytics Accelerator. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

4.1 Program Level Information

The following APAR fixes against previous releases of IBM Db2 Analytics Accelerator for z/OS have been incorporated into this release. They are listed by FMID.

- FMID HAQT510
  - PI73062
  - PI76900
  - PI80431

- FMID HCHCA20
  - PM84163
  - PM84370
  - PM84378
  - PM86096
  - PM86126
  - PM88648
  - PM88897
  - PM89846
  - PM90789
  - PM93405
  - PM94430
  - PM95092
  - PM96087

4.2 Service Level Information

PTFs containing APAR fixes against this release of the InfoSphere Data Replication for Db2 for z/OS (HCHCA21) have been incorporated into this product package. For a list of included PTFs, examine the ++VER statement in the product's SMPMCS, or see 7.1, “InfoSphere Data Replication for Db2 for z/OS, Install Logic” on page 30.

Frequently check the Db2 Analytics Accelerator PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then add the FIXCAT(IBM.PRODUCTINSTALL-REQUIREDSERVICE) operand on your APPLY CHECK command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.
5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating Db2 Analytics Accelerator. The following terminology is used:

- **Driving system**: the system on which SMP/E is executed to install the program.
  
The program might have specific operating system or product level requirements for using processes, such as binder or assembly utilities during the installation.

- **Target system**: the system on which the program is configured and run.
  
The program might have specific product level requirements, such as needing access to the library of another product for link-edits. These requirements, either mandatory or optional, might directly affect the element during the installation or in its basic or enhanced operation.

In many cases, you can use a system as both a driving system and a target system. However, you can make a separate IPL-able clone of the running system to use as a target system. The clone must include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Use separate driving and target systems in the following situations:

- When you install a new level of a product that is already installed, the new level of the product will replace the old one. By installing the new level onto a separate target system, you can test the new level and keep the old one in production at the same time.

- When you install a product that shares libraries or load modules with other products, the installation can disrupt the other products. By installing the product onto a separate target system, you can assess these impacts without disrupting your production system.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install Db2 Analytics Accelerator.

5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.2 Programming Requirements
Figure 9. Driving System Software Requirements

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name</th>
<th>Minimum VRM</th>
<th>Minimum Service Level will satisfy these APARs</th>
<th>Included in the shipped product?</th>
</tr>
</thead>
<tbody>
<tr>
<td>5650-ZOS</td>
<td>z/OS</td>
<td>V02.01.00</td>
<td>N/A</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: SMP/E is a requirement for Installation and is an element of z/OS but can also be ordered as a separate product, 5655-G44, minimally V03.06.00.

Note: Installation might require migration to new z/OS releases to be service supported. See http://www-03.ibm.com/systems/z/os/zos/support/zos_eos_dates.html.

Db2 Analytics Accelerator is installed into a file system, either HFS or zFS. Before installing Db2 Analytics Accelerator, you must ensure that the target system file system data sets are available for processing on the driving system. OMVS must be active on the driving system and the target system file system data sets must be mounted on the driving system.

If you plan to install Db2 Analytics Accelerator in a zFS file system, this requires that zFS be active on the driving system. Information on activating and using zFS can be found in z/OS Distributed File Service zSeries File System Administration, SC24-5989.

5.2 Target System Requirements

This section describes the environment of the target system required to install and use Db2 Analytics Accelerator.

Db2 Analytics Accelerator installs in the DBS (P115) SREL.

5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

5.2.2 Programming Requirements

5.2.2.1 Installation Requisites: Installation requisites identify products that are required and must be present on the system or products that are not required but should be present on the system for the successful installation of this product.

Mandatory installation requisites identify products that are required on the system for the successful installation of this product.
Db2 Analytics Accelerator has no mandatory installation requisites.

Conditional installation requisites identify products that are *not* required for successful installation of this product but can resolve such things as certain warning messages at installation time.

Db2 Analytics Accelerator has no conditional installation requisites.

### 5.2.2.2 Operational Requisites:

Operational requisites are products that are required and *must* be present on the system or products that are not required but *should* be present on the system for this product to operate all or part of its functions.

Mandatory operational requisites identify products that are required for this product to operate its basic functions.

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any one of the following:</td>
<td></td>
</tr>
<tr>
<td>5615-DB2</td>
<td>Db2 for z/OS V11.01.00</td>
</tr>
<tr>
<td>5697-P43</td>
<td>Db2 for z/OS Value Unit Edition V11.01.00</td>
</tr>
<tr>
<td>5650-DB2</td>
<td>Db2 for z/OS V12.01.00</td>
</tr>
<tr>
<td>5770-AF3</td>
<td>Db2 for z/OS Value Unit Edition V12.01.00</td>
</tr>
</tbody>
</table>

Conditional operational requisites identify products that are *not* required for this product to operate its basic functions but are required at run time for this product to operate specific functions.

Db2 Analytics Accelerator has no conditional operational requisites.

### 5.2.2.3 Toleration/Coexistence Requisites:

Toleration/coexistence requisites identify products that must be present on sharing systems. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD environment at different time intervals.

Db2 Analytics Accelerator has no toleration/coexistence requisites.

### 5.2.2.4 Incompatibility (Negative) Requisites:

Negative requisites identify products that must *not* be installed on the same system as this product.

Db2 Analytics Accelerator has no negative requisites.
5.2.3 DASD Storage Requirements

Db2 Analytics Accelerator libraries can reside on all supported DASD types.

Figure 11 on page 14 lists the total space that is required for each type of library.

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Total Space Required in 3390 Trks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>3570 tracks for Db2 Analytics Accelerator</td>
</tr>
<tr>
<td></td>
<td>854 tracks for InfoSphere Data Replication</td>
</tr>
<tr>
<td>Distribution</td>
<td>4695 tracks for Db2 Analytics Accelerator</td>
</tr>
<tr>
<td></td>
<td>1632 tracks for InfoSphere Data Replication</td>
</tr>
<tr>
<td>File System(s)</td>
<td>750 tracks for /usr/lpp/IBM/aqt/v7r1m0</td>
</tr>
<tr>
<td></td>
<td>750 tracks for /usr/lpp/chc/V10R2M1</td>
</tr>
</tbody>
</table>

Notes:

1. For non-RECFM U data sets, IBM recommends using system-determined block sizes for efficient DASD utilization. For RECFM U data sets, IBM recommends using a block size of 32760, which is most efficient from the performance and DASD utilization perspective.

2. Abbreviations used for data set types are shown as follows.

   U Unique data set, allocated by this product and used by only this product. This table provides all the required information to determine the correct storage for this data set. You do not need to refer to other tables or program directories for the data set size.

   S Shared data set, allocated by this product and used by this product and other products. To determine the correct storage needed for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.

   E Existing shared data set, used by this product and other products. This data set is not allocated by this product. To determine the correct storage for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old release and reclaim the space that was used by the old release and any service that had been installed. You can determine whether these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information about the names and sizes of the required data sets, see 6.1.8, “Allocate SMP/E Target and Distribution Libraries” on page 24.
3. Abbreviations used for the file system path type are as follows.

- **N** New path, created by this product.
- **X** Path created by this product, but might already exist from a previous release.
- **P** Previously existing path, created by another product.

4. All target and distribution libraries listed have the following attributes:

   - The default name of the data set can be changed.
   - The default block size of the data set can be changed.
   - The data set can be merged with another data set that has equivalent characteristics.
   - The data set can be either a PDS or a PDSE, except for SAQTICU, SAQTMOD, SCHCLOAD, AAQTHFS, AAQTMOD, AAQTMOD, and ACHCLOAD, which must be PDSEs.

5. All target libraries listed have the following attributes:

   - These data sets can be SMS-managed, but they are not required to be SMS-managed.
   - These data sets are not required to reside on the IPL volume.
   - The values in the "Member Type" column are not necessarily the actual SMP/E element types that are identified in the SMPMCS.

6. All target libraries that are listed and contain load modules have the following attributes:

   - These data sets can be in the LPA, but they are not required to be in the LPA.
   - These data sets can be in the LNKLST.
   - The SAQTMOD dataset must be APF authorized.
   - Db2 Analytics Accelerator requires that the SMPLTS data set must be a PDSE. If your existing SMPLTS is a PDS, you will need to allocate a new PDSE and copy your existing SMPLTS into it and then change the SMPLTS DDDEF entry to indicate the new PDSE data set.

The following figures describe the target and distribution libraries and file system paths required to install Db2 Analytics Accelerator. The storage requirements of Db2 Analytics Accelerator must be added to the storage required by other programs that have data in the same library. or path.

**Note:** Use the data in these tables to determine which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

### Figure 12 (Page 1 of 2). Storage Requirements for Db2 Analytics Accelerator Target Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>T</th>
<th>Y</th>
<th>O</th>
<th>C</th>
<th>R</th>
<th>E</th>
<th>L</th>
<th>No. of Trks</th>
<th>No. of Dir Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAQTBASE</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>6</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAQTDBRM</td>
<td>MAC</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAQTICU</td>
<td>PROGRAM</td>
<td>Any</td>
<td>U</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>10</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAQTLICI</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Figure 12. Storage Requirements for Db2 Analytics Accelerator Target Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>Member Type</th>
<th>Type</th>
<th>Target</th>
<th>Volume</th>
<th>T</th>
<th>E</th>
<th>R</th>
<th>L</th>
<th>No. of 3390</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAQTMOD</td>
<td>PROGRAM</td>
<td>Any</td>
<td>U</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>3500</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAQTSAMP</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>46</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 13. Storage Requirements for InfoSphere Data Replication Target Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>Member Type</th>
<th>Type</th>
<th>Target</th>
<th>Volume</th>
<th>T</th>
<th>E</th>
<th>R</th>
<th>L</th>
<th>No. of 3390</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHCASM</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCC</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>VB</td>
<td>256</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCCNTL</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>21</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCCOB</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCDATA</td>
<td>DATA</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCDBRM</td>
<td>DATA</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>19</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCH</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>VB</td>
<td>256</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCLOAD</td>
<td>MOD</td>
<td>Any</td>
<td>U</td>
<td>PDSE</td>
<td>U</td>
<td>0</td>
<td>776</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCMAC</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCNOTC</td>
<td>SAMP</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>VB</td>
<td>137</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHCTTL</td>
<td>DATA</td>
<td>Any</td>
<td>U</td>
<td>PDS</td>
<td>VB</td>
<td>256</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 14. Db2 Analytics Accelerator File System Paths

<table>
<thead>
<tr>
<th>DDNAME</th>
<th>Path Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAQTHFS</td>
<td>/usr/lpp/IBM/aqt/v7r1m0/IBM</td>
</tr>
</tbody>
</table>
### Figure 15. InfoSphere Data Replication File System Paths

<table>
<thead>
<tr>
<th>DDNAME</th>
<th>TYPE</th>
<th>Path Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHCJAVA</td>
<td>N</td>
<td>/usr/lpp/chc/V10R2M1/IBM</td>
</tr>
</tbody>
</table>

### Figure 16. Storage Requirements for Db2 Analytics Accelerator Distribution Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>DDNAME</th>
<th>REPE</th>
<th>LFEC</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAQTBASE</td>
<td>U PDS FB</td>
<td>80</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>AAQTDBRM</td>
<td>U PDS FB</td>
<td>80</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>AAQTHFS</td>
<td>U PDSE VB</td>
<td>1028</td>
<td>1125</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>AAQTICU</td>
<td>U PDSE U</td>
<td>0</td>
<td>10</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>AAQTLICI</td>
<td>U PDS FB</td>
<td>80</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>AAQTMOD</td>
<td>U PDSE U</td>
<td>0</td>
<td>3500</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>AAQTSAMP</td>
<td>U PDS FB</td>
<td>80</td>
<td>46</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

### Figure 17 (Page 1 of 2). Storage Requirements for InfoSphere Data Replication Distribution Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>DDNAME</th>
<th>REPE</th>
<th>LFEC</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHCASM</td>
<td>U PDS FB</td>
<td>80</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACHCC</td>
<td>U PDS VB</td>
<td>256</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACHCCNTL</td>
<td>U PDS FB</td>
<td>80</td>
<td>21</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ACHCCOB</td>
<td>U PDS FB</td>
<td>80</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACHCDATA</td>
<td>U PDS FB</td>
<td>80</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACHCDBRM</td>
<td>U PDS FB</td>
<td>80</td>
<td>19</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ACHCH</td>
<td>U PDS VB</td>
<td>256</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>ACHCJAVA</td>
<td>U PDS VB</td>
<td>255</td>
<td>541</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACHCLOAD</td>
<td>U PDSE U</td>
<td>0</td>
<td>1013</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>ACHCMAC</td>
<td>U PDS FB</td>
<td>80</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACHCNOTC</td>
<td>U PDS VB</td>
<td>137</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
5.3 FMIDs Deleted

Installing Db2 Analytics Accelerator might result in the deletion of other FMIDs. To see which FMIDs will be deleted, examine the +++VER statement in the SMPMCS of the product.

If you do not want to delete these FMIDs at this time, install Db2 Analytics Accelerator into separate SMP/E target and distribution zones.

Note: These FMIDs are not automatically deleted from the Global Zone. If you want to delete these FMIDs from the Global Zone, use the SMP/E REJECT NOFMID DELETEFMID command. See the SMP/E Commands book for details.

5.4 Special Considerations

PDSE Considerations:

Db2 Analytics Accelerator uses the “partitioned data set extended” or PDSE format for the SAQTMOD, SAQTICU, and SCHCLOAD target libraries. There are some operational differences between PDS and PDSE data sets. The PDS format may be shared by more than one z/OS system and no special precautions are necessary. However the PDSE format may only be shared by z/OS systems which are part of a sysplex or which are connected using Global Resource Serialization (are in a GRS complex). If z/OS systems share use of a PDSE data set outside of a sysplex or GRS environment, you may experience severe problems when the data set is updated. This is due to the fact that PDSE directory information is cached in storage, and when the data set is updated from one system the other system(s) have no knowledge of the update, and their cached directory information will be incorrect.

You must take care not to share the SAQTMOD, SAQTICU, and SCHCLOAD data sets between z/OS systems unless they are in a sysplex or are connected in a GRS complex. If you need to share the content of the SAQTMOD, SAQTICU, and SCHCLOAD data sets, a separate copy must be created for each z/OS system.
6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of Db2 Analytics Accelerator.

Please note the following points:

- If you want to install Db2 Analytics Accelerator into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets.

- You can use the sample jobs that are provided to perform part or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries that are required for SMP/E execution have been defined in appropriate zones.

- You can use the SMP/E dialogs instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing Db2 Analytics Accelerator

6.1.1 SMP/E Considerations for Installing Db2 Analytics Accelerator

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of Db2 Analytics Accelerator.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 18. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

<table>
<thead>
<tr>
<th>Subentry</th>
<th>Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSSPACE</td>
<td>(5000,2500,500)</td>
<td>3390 DASD tracks</td>
</tr>
<tr>
<td>PEMAX</td>
<td>SMP/E Default</td>
<td>IBM recommends using the SMP/E default for PEMAX.</td>
</tr>
</tbody>
</table>
6.1.3 SMP/E CALLLIBS Processing

Db2 Analytics Accelerator uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When Db2 Analytics Accelerator is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB
- SCEECPP
- SCEELKED
- SCEELKEX
- SEZACMTX
- SEZARNT1

**Note:** CALLLIBS uses the previous DDDEFs only to resolve the link-edit for Db2 Analytics Accelerator. These data sets are not updated during the installation of Db2 Analytics Accelerator.

6.1.4 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install Db2 Analytics Accelerator:

<table>
<thead>
<tr>
<th>Job Name</th>
<th>Job Type</th>
<th>Description</th>
<th>RELFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQTALA</td>
<td>SMP/E</td>
<td>Sample job to allocate and initialize a new SMP/E CSI data set <strong>(Optional)</strong></td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>AQTALB</td>
<td>SMP/E</td>
<td>Sample job to allocate SMP/E data sets <strong>(Optional)</strong></td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>AQTRCECV</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job for Db2 Analytics Accelerator</td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>AQTRCECV1</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job for Analytics Accelerator on IBM Integrated Analytics System</td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>AQTRCECV2</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job for Analytics Accelerator on IBM Z</td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>CHCRECEV</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job for InfoSphere Data Replication</td>
<td>IBM.HCHCA21.F4</td>
</tr>
<tr>
<td>AQTALLOC</td>
<td>ALLOCATE</td>
<td>Sample job to allocate target and distribution libraries for Db2 Analytics Accelerator</td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>CHCALLOC</td>
<td>ALLOCATE</td>
<td>Sample job to allocate target and distribution libraries for InfoSphere Data Replication</td>
<td>IBM.HCHCA21.F4</td>
</tr>
<tr>
<td>AQTZFS</td>
<td>ALLOMTZFS</td>
<td>Sample job to allocate new ZFS data set for Db2 Analytics Accelerator <strong>(Optional)</strong></td>
<td>IBM.HAQT710.F1</td>
</tr>
</tbody>
</table>
You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.7, “Perform SMP/E RECEIVE” on page 23) then copy the jobs from the RELFILES to a work data set for editing and submission. See Figure 19 on page 20 to find the appropriate relfile data set.

You can also copy the sample installation jobs from the tape or product files by submitting the following job. Depending on your distribution medium, use either the //TAPEIN or the //FILEIN DD statement and comment out or delete the other statement. Before you submit the job, add a job card and change the lowercase parameters to uppercase values to meet the requirements of your site.

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//**************************************************************************
//* Make the //TAPEIN DD statement below active if you install* 
//* from a CBPDO tape by uncommenting the DD statement below. * 
//**************************************************************************
//TAPEIN DD DSN=IBM.HAQT710.F1,UNIT=tunit,
//  VOL=SER=volser,LABEL=(x,SL),
//  DISP=(OLD,KEEP)
//TAPEIN2 DD DSN=IBM.HCHCA21.F4,UNIT=tunit,
//  VOL=SER=volser,LABEL=(x,SL),
//  DISP=(OLD,KEEP)
//**************************************************************************
//* Make the //TAPEIN DD statement below active if you install* 
//* from a product tape received outside the CBPDO process * 
//* (using the optional SMP/E RECEIVE job) by uncommenting * 
//* the DD statement below. * 
//**************************************************************************
//TAPEIN DD DSN=IBM.HAQT710.F1,UNIT=tunit,
```

### Figure 19 (Page 2 of 2). Sample Installation Jobs

<table>
<thead>
<tr>
<th>Job Name</th>
<th>Job Type</th>
<th>Description</th>
<th>RELFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHCZFS</td>
<td>ALLOMTZFS</td>
<td>Sample job to allocate new ZFS data set for InfoSphere Data Replication (Optional)</td>
<td>IBM.HCHCA21.F4</td>
</tr>
<tr>
<td>AQTISMKD</td>
<td>MKDIR</td>
<td>Sample job to invoke the supplied AQTMKDIR EXEC to allocate HFS or zFS paths for Db2 Analytics Accelerator</td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>CHCISMKD</td>
<td>MKDIR</td>
<td>Sample job to invoke the supplied CHCMKDIR EXEC to allocate HFS or zFS paths for InfoSphere Data Replication</td>
<td>IBM.HCHCA21.F4</td>
</tr>
<tr>
<td>AQTDDDEF</td>
<td>DDDEF</td>
<td>Sample job to define SMP/E DDDEFs for Db2 Analytics Accelerator</td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>CHCDDDEF</td>
<td>DDDEF</td>
<td>Sample job to define SMP/E DDDEFs for InfoSphere Data Replication</td>
<td>IBM.HCHCA21.F4</td>
</tr>
<tr>
<td>AQTAPPLY</td>
<td>APPLY</td>
<td>Sample APPLY job</td>
<td>IBM.HAQT710.F1</td>
</tr>
<tr>
<td>AQTACCEP</td>
<td>ACCEPT</td>
<td>Sample ACCEPT job</td>
<td>IBM.HAQT710.F1</td>
</tr>
</tbody>
</table>
See the following information to update the statements in the previous sample:

**TAPEIN** and **TAPEIN2**:
- `tunit` is the unit value that matches the product package.
- `volser` is the volume serial that matches the product package.
- `x` is the tape file number that indicates the location of the data set name on the tape.

See the documentation that is provided by CBPDO for the location of IBM.HAQT710.F1, and IBM.HCHCA21.F4 on the tape(s).

**FILEIN** and **FILEIN2**:
- `filevol` is the volume serial of the DASD device where the downloaded files reside.

**OUT**:
- `jcl-library-name` is the name of the output data set where the sample jobs are stored.
- `dasdvol` is the volume serial of the DASD device where the output data set resides.

**SYSIN**:
- `xxxxIN` is either TAPEIN or FILEIN depending on your input DD statement.
- `xxxxIN2` is either TAPEIN2 or FILEIN2 depending on your input DD statement.
6.1.5 Allocate SMP/E CSI (Optional)

If you are using an existing CSI, do not execute this job.

If you are allocating a new SMP/E data set for this install, edit and submit sample job AQTALA to allocate the SMP/E data set for Db2 Analytics Accelerator. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

6.1.6 Initialize CSI zones (Optional)

If you are using an existing CSI, do not execute this job.

Edit and submit sample job AQTALB to initialize SMP/E zones for Db2 Analytics Accelerator. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.

6.1.7 Perform SMP/E RECEIVE

If you have obtained Db2 Analytics Accelerator as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the Db2 Analytics Accelerator FMIDs, service, and HOLDDATA that are included on the CBPDO package. For more information, see the documentation that is included in the CBPDO.

If you are installing the Analytics Accelerator on IBM Integrated Analytics System feature, edit and submit sample jobs AQTRECEV, and AQTRECV1 to perform the SMP/E RECEIVE for this feature. Consult the instructions in the sample jobs for more information.

If you are installing the Analytics Accelerator on IBM Z feature, edit and submit sample jobs AQTRECEV, and AQTRECV2 to perform the SMP/E RECEIVE for this feature. Consult the instructions in the sample jobs for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if these jobs runs correctly.

Note: If you are installing both features, the sample job AQTRECEV should only be run once.

You can also choose to edit and submit sample job CHCRECEV to perform the SMP/E RECEIVE for InfoSphere Data Replication. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if this job runs correctly.
6.1.8 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job AQTALLOC to allocate the SMP/E target and distribution libraries for Db2 Analytics Accelerator. Consult the instructions in the sample job for more information.

Edit and submit sample job CHCALLOC to allocate the SMP/E target and distribution libraries for InfoSphere Data Replication. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if these jobs runs correctly.

6.1.9 Allocate, create and mount ZFS Files (Optional)

This job allocates, creates a mountpoint, and mounts zFS data sets.

If you plan to install Db2 Analytics Accelerator into a new z/OS UNIX file system, you can edit and submit the optional AQTZFS job to perform the following tasks:

- Create the z/OS UNIX file system
- Create a mount point
- Mount the z/OS UNIX file system on the mountpoint

Consult the instructions in the sample job for more information.

If you plan to install InfoSphere Data Replication into a new z/OS UNIX file system, you can edit and submit the optional CHCZFS job to perform the following tasks:

- Create the z/OS UNIX file system
- Create a mount point
- Mount the z/OS UNIX file system on the mountpoint

Consult the instructions in the sample job for more information.

The recommended z/OS UNIX file system type is zFS. The recommended mount points are:

- /usr/lpp/IBM/aqt/v7r1m0 for Db2 Analytics Accelerator.
- /usr/lpp/chc/V10R2M1 for InfoSphere Data Replication.

Before running the sample jobs to create the z/OS UNIX file systems, you must ensure that OMVS is active on the driving system. zFS must be active on the driving system if you are installing Db2 Analytics Accelerator, and InfoSphere Data Replication into a file system that is zFS.

If you create a new file system for this product, consider updating the BPXPRMxx PARMLIB member to mount the new file system at IPL time. This action can be helpful if an IPL occurs before the installation is completed.
MOUNT FILESYSTEM('#dsn')
MOUNTPOINT('#mntpnt')
MODE(RDRW) /* can be MODE(READ) */
TYPE(ZFS) PARM('AGGREGROW') /* zFS, with extents */

See the following information to update the statements in the previous sample:

- **#dsn** is the name of the data set holding the z/OS UNIX file system.
- **#mntpnt** is the name of the mount point where the z/OS UNIX file system will be mounted - either /usr/lpp/IBM/aqt/v7r1m0 or /usr/lpp/chc/V10R2M1.

**Expected Return Codes and Messages:** You will receive a return code of 0 if these jobs runs correctly.

### 6.1.10 Allocate File System Paths

The target system HFS or zFS data set must be mounted on the driving system when running the sample jobs, AQTISMKD, and CHCISMKD, since these jobs will create paths in the HFS or zFS.

Before running the sample job to create the paths in the file system, you must ensure that OMVS is active on the driving system and that the target system's HFS or zFS file system is mounted to the driving system. zFS must be active on the driving system if you are installing Db2 Analytics Accelerator, and InfoSphere Data Replication, into a file system that is zFS.

If you plan to install Db2 Analytics Accelerator into a new HFS or zFS file system, you must create the mountpoint and mount the new file system to the driving system for Db2 Analytics Accelerator.

If you plan to install InfoSphere Data Replication into a new HFS or zFS file system, you must create the mountpoint and mount the new file system to the driving system for InfoSphere Data Replication.

The recommended mountpoint for Db2 Analytics Accelerator is /usr/lpp/IBM/aqt/v7r1m0.
The recommended mountpoint for InfoSphere Data Replication is /usr/lpp/chc/V10R2M1.

Edit and submit sample job AQTISMKD to allocate the HFS or zFS paths for Db2 Analytics Accelerator. Consult the instructions in the sample job for more information.

Edit and submit sample job CHCISMKD to allocate the HFS or zFS paths for InfoSphere Data Replication. Consult the instructions in the sample job for more information.

If you create a new file system for this product, consider updating the BPXPRMxx PARMLIB member to mount the new file system at IPL time. This action can be helpful if an IPL occurs before the installation is completed.

**Expected Return Codes and Messages:** You will receive a return code of 0 if these jobs runs correctly.
6.1.11 Create DDDEF Entries

Edit and submit sample job AQTDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for Db2 Analytics Accelerator. Consult the instructions in the sample job for more information.

Edit and submit sample job CHCDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for InfoSphere Data Replication. Consult the instructions in the sample job for more information.

Expected Return Codes and Messages: You will receive a return code of 0 if these jobs runs correctly.

6.1.12 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job AQTAPPLY to perform an SMP/E APPLY CHECK for Db2 Analytics Accelerator. Consult the instructions in the sample job for more information.

The latest HOLDDATA is available through several different portals, including http://service.software.ibm.com/holddata/390holddata.html. The latest HOLDDATA may identify HIPER and FIXCAT APARs for the FMIDs you will be installing. An APPLY CHECK will help you determine if any HIPER or FIXCAT APARs are applicable to the FMIDs you are installing. If there are any applicable HIPER or FIXCAT APARs, the APPLY CHECK will also identify fixing PTFs that will resolve the APARs, if a fixing PTF is available.

You should install the FMIDs regardless of the status of unresolved HIPER or FIXCAT APARs. However, do not deploy the software until the unresolved HIPER and FIXCAT APARs have been analyzed to determine their applicability. That is, before deploying the software either ensure fixing PTFs are applied to resolve all HIPER or FIXCAT APARs, or ensure the problems reported by all HIPER or FIXCAT APARs are not applicable to your environment.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the PRE, ID, REQ, and IFREQ on the APPLY CHECK. The SMP/E root cause analysis identifies the cause only of errors and not of warnings (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings, instead of errors).

Here are sample APPLY commands:

   a. To ensure that all recommended and critical service is installed with the FMIDs, receive the latest HOLDDATA and use the APPLY CHECK command as follows

   APPLY S(fm1d,fm1d,...) CHECK
   FORFMID(fm1d,fm1d,...)
   SOURCEID(RSU+*)
   FIXCAT(IBM.ProductInstall-RequiredService)
   GROUPEXTEND.

   Some HIPER APARs might not have fixing PTFs available yet. You should analyze the symptom flags for the unresolved HIPER APARs to determine if the reported problem is applicable to your environment and if you should bypass the specific ERROR HOLDs in order to continue the installation of the FMIDs.
This method requires more initial research, but can provide resolution for all HIPERs that have fixing PTFs available and are not in a PE chain. Unresolved PEs or HIPERs might still exist and require the use of BYPASS.

b. To install the FMIDs without regard for unresolved HIPER APARs, you can add the BYPASS(HOLDCLASS(HIPER)) operand to the APPLY CHECK command. This will allow you to install FMIDs even though one or more unresolved HIPER APARs exist. After the FMIDs are installed, use the SMP/E REPORT ERRS SysMODS command to identify unresolved HIPER APARs and any fixing PTFs.

```
APPLY S(fmid,fmid,...) CHECK
FORFMID(fmid,fmid,...)
SOURCEID(RSU/c5197)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND
BYPASS(HOLDCLASS(HIPER),HOLDFIXCAT).
```

This method is quicker, but requires subsequent review of the Exception SYSMOD report produced by the REPORT ERRS SysMODS command to investigate any unresolved HIPERs. If you have received the latest HOLDDATA, you can also choose to use the REPORT MISSINGFIX command and specify Fix Category IBM.ProductInstall-RequiredService to investigate missing recommended service.

If you bypass HOLDS during the installation of the FMIDs because fixing PTFs are not yet available, you can be notified when the fixing PTFs are available by using the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink.

2. After you take actions that are indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

**Note:** The GROUPEXTEND operand indicates that SMP/E applies all requisite SYSMODs. The requisite SYSMODs might be applicable to other functions.

**Expected Return Codes and Messages from APPLY CHECK:** You will receive a return code of 0 if this job runs correctly.

**Expected Return Codes and Messages from APPLY:** You will receive a return code of 0 if this job runs correctly.

### 6.1.13 Perform SMP/E ACCEPT

Edit and submit sample job AQTAACCEPT to perform an SMP/E ACCEPT CHECK for Db2 Analytics Accelerator. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the PRE, ID, REQ, and IFREQ on the ACCEPT CHECK. The SMP/E root cause analysis identifies the cause of errors but not warnings (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).
Before you use SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. In this way, you can save the entries that are produced from JCLIN in the distribution zone whenever a SYSMOD that contains inline JCLIN is accepted. For more information about the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E Commands book for details.

After you take actions that are indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

**Note:** The GROUPEXTEND operand indicates that SMP/E accepts all requisite SYSMODs. The requisite SYSMODs might be applicable to other functions.

**Expected Return Codes and Messages from ACCEPT CHECK:** You will receive a return code of 0 if this job runs correctly.

If PTFs that contain replacement modules are accepted, SMP/E ACCEPT processing will link-edit or bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue messages that indicate unresolved external references, which will result in a return code of 4 during the ACCEPT phase. You can ignore these messages, because the distribution libraries are not executable and the unresolved external references do not affect the executable system libraries.

**Expected Return Codes and Messages from ACCEPT:** You will receive a return code of 0 if this job runs correctly.

### 6.1.14 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command identifies requisites for products that are installed in separate zones. This command also creates APPLY and ACCEPT commands in the SMPPUNCH data set. You can use the APPLY and ACCEPT commands to install those cross-zone requisites that the SMP/E REPORT CROSSZONE command identifies.

After you install Db2 Analytics Accelerator, it is recommended that you run REPORT CROSSZONE against the new or updated target and distribution zones. REPORT CROSSZONE requires a global zone with ZONEINDEX entries that describe all the target and distribution libraries to be reported on.

For more information about REPORT CROSSZONE, see the SMP/E manuals.

### 6.1.15 Cleaning Up Obsolete Data Sets, Paths, and DDDEFs

The following data sets, which were allocated and used by previous releases of this product, are no longer used in this release. You can delete these obsolete data sets after you delete the previous release from your system.

- SAQTPKGI and AAQTPKGI

The following file system paths, which were created and used by previous releases of this product, are no longer used in this release. You can delete these obsolete file system paths after you delete the previous release from your system.
The following DDDEF entries, which were created and used by previous releases of this product, are no longer used in this release. You can delete these obsolete DDDEF entries after you delete the previous release from your system.

- /usr/lpp/IBM/aqt/v6r1m0
- SAQTPKGI and AAQTPKGI

### 6.2 Activating Db2 Analytics Accelerator

#### 6.2.1 File System Execution

If you mount the file system in which you have installed Db2 Analytics Accelerator in read-only mode during execution, then you do not have to take further actions to activate Db2 Analytics Accelerator.

#### 6.2.2 Product Customization

The publication *IBM Db2 Analytics Accelerator Studio User’s Guide* (SH12-7082) contains the necessary information to customize and use Db2 Analytics Accelerator.
7.0 Appendix.

7.1 InfoSphere Data Replication for Db2 for z/OS, Install Logic

The entire set of SMP modification control statements for the installation can be viewed in the accompanying SMPMCS file.

The Install Logic for InfoSphere Data Replication for Db2 for z/OS follows:

```
++FUNCTION(HCHCA21 ) FESN(/zerodot5/zerodot355 ) REWORK(2/zerodot16294 )
FILES(13 ) RFDSPFX(IBM)
DESC( InfoSphere Data Replication for Db2 for z/OS )
/*
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5655-DRP COPYRIGHT IBM CORP 1997, 2013
ALL RIGHTS RESERVED.
US GOVERNMENT USERS RESTRICTED RIGHTS -
USE, DUPLICATION OR DISCLOSURE RESTRICTED
BY GSA ADP SCHEDULE CONTRACT WITH IBM CORP.
*/

++VER(P115 ) DELETE(HCHCA20 HCHC540 HCHC620 HCHC650 )
SUP(A104783 A104846 A104977 A105665 A106324 A106515 A106771
A108186 A108533 A108578 A108959 A109184 A109252 A110193
A110537 A111311 A111414 A112134 A112249 A112824 A112861
A113388 A113960 A114004 A114727 A115040 A115292 A115767
A116453 A116713 A117252 A117413 A117665 A117670 A118423
A118447 A118554 A119600 A119935 A120018 A120159 A121504
A122276 A122349 A122412 A122740 A122926 A123993 A124135
A124360 A125092 A125122 A125442 A126558 A126750 A126807
A127487 A128193 A128423 A128868 A129795 A129942 A130086
A130120 A130396 A130582 A130583 A131070 A131559 A133523
A134240 A135576 A135847 A136002 A136111 A136451 A137198
A137576 A139321 A139973 A141065 A141473 A141897 A143720
A144197 A144318 A144426 A145115 A145259 A145362 A145468
A147212 A147907 A148361 A148685 A148926 A149337 A150608
A150763 A151183 A151473 A151531 A152333 A153026 A153145
A154370 A156249 A156552 A156655 A157141 A157199 A157425
A158162 A159077 A159430 A159477 A161406 A161878 A162311
A162673 A162752 A163384 A163642 A164090 A165350 A165518
A166448 A169352 A169964 A169991 A170189 AM94320 AM96858
```
| AM97911 | AM97931 | AM98098 | AM98299 | AM98510 | AM98636 | AM98904 |
| AM98931 | AM99485 | BI05665 | BI06515 | BI09252 | BI18854 | BI26558 |
| BI57141 | BI62311 | BI66448 | BM94320 | CI57141 | HCHCA20 | HCHC540 |
| HCHC620 | HCHC650 | UI11785 | UI11954 | UI12429 | UI12434 | UI12594 |
| UI12610 | UI12963 | UI12974 | UI13081 | UI13632 | UI14164 | UI14183 |
| UI14226 | UI14635 | UI14776 | UI14802 | UI14954 | UI15372 | UI15834 |
| UI15924 | UI15928 | UI16073 | UI16103 | UI16625 | UI16710 | UI16751 |
| UI16995 | UI17130 | UI17389 | UI17645 | UI17798 | UI17856 | UI17887 |
| UI18204 | UI18275 | UI18385 | UI18896 | UI18910 | UI18978 | UI19469 |
| UI19532 | UI19763 | UI19857 | UI19933 | UI20150 | UI20689 | UI20723 |
| UI20979 | UI21138 | UI21169 | UI21399 | UI21440 | UI22046 | UI22216 |
| UI22913 | UI23170 | UI23323 | UI23558 | UI23699 | UI23734 | UI23832 |
| UI24034 | UI24280 | UI24309 | UI24663 | UI24766 | UI24875 | UI24942 |
| UI25230 | UI25435 | UI25727 | UI26036 | UI26148 | UI26301 | UI26653 |
| UI27018 | UI27521 | UI27578 | UI27841 | UI27993 | UI28084 | UI28923 |
| UI29206 | UI29322 | UI29590 | UI29666 | UI29777 | UI30285 | UI30337 |
| UI30740 | UI31021 | UI31148 | UI31287 | UI31302 | UI31507 | UI31571 |
| UI31739 | UI32368 | UI32588 | UI32707 | UI32810 | UI33393 | UI33493 |
| UI33528 | UI33603 | UI33797 | UI35151 | UI35258 | UI35439 | UI35501 |
| UI35753 | UI36177 | UI36266 | UI36461 | UI37053 | UI37380 | UI37534 |
| UI37537 | UI37819 | UI38021 | UI38257 | UI38681 | UI38702 | UI38883 |
| UI39307 | UI39653 | UI39921 | UI40401 | UI40509 | UI40892 | UI41321 |
| UI41378 | UI41431 | UK98173 | UK98309 | UK98330 | UK98407 | UK98416 |
| UK98567 | UK98579 | UK98667 |

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Reader's Comments

Program Directory for IBM Db2 Analytics Accelerator for z/OS, November 2017

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