

# Release Bulletin Enterprise Connect<sup>™</sup> Data Access 15.7

Linux and UNIX

#### DOCUMENT ID: DC74921-01-1570-02

LAST REVISED: July 2013

Copyright © 2013 by Sybase, Inc. All rights reserved.

This publication pertains to Sybase software and to any subsequent release until otherwise indicated in new editions or technical notes. Information in this document is subject to change without notice. The software described herein is furnished under a license agreement, and it may be used or copied only in accordance with the terms of that agreement.

Upgrades are provided only at regularly scheduled software release dates. No part of this publication may be reproduced, transmitted, or translated in any form or by any means, electronic, mechanical, manual, optical, or otherwise, without the prior written permission of Sybase, Inc.

Sybase trademarks can be viewed at the Sybase trademarks page at *http://www.sybase.com/detail?id=1011207*. Sybase and the marks listed are trademarks of Sybase, Inc. <sup>®</sup> indicates registration in the United States of America.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world.

Java and all Java-based marks are trademarks or registered trademarks of Oracle and/or its affiliates in the U.S. and other countries.

Unicode and the Unicode Logo are registered trademarks of Unicode, Inc.

All other company and product names mentioned may be trademarks of the respective companies with which they are associated.

Use, duplication, or disclosure by the government is subject to the restrictions set forth in subparagraph (c)(1)(ii) of DFARS 52.227-7013 for the DOD and as set forth in FAR 52.227-19(a)-(d) for civilian agencies.

Sybase, Inc., One Sybase Drive, Dublin, CA 94568.

# Contents

Product Summary	1
What's New in Version 15.7	1
System Requirements for UNIX Platforms	2
System Requirements for DirectConnect Manager	2
Product Compatibilities	3
Compatibility with DirectConnect for z/OS 15.0.1	
Installation and Configuration	3
Special Installation and Configuration Instructions	
ECDA 15.7 Installation on IBM AIX 6.1	
Downloading the Oracle Instant Client Libraries Package	
Installing Oracle Client Libraries in to the DCO	4
Directory	5
ECDA for Oracle - StartServer on Linux	5
DCManager on AIX 7.1 on ECDA for Oracle and ECDA for ODBC	
HP-UX Itanium Runtime Libraries Missing on	
ECDA for ODBC	6
ODBC Back-End (Target-Side) Drivers	6
Migration Utilities	6
Editing the interfaces File	6
Configuring the Data Source for DB2 UDB	7
Targets	
Installing Multiple Products on the Same Machine	7
Uninstallation from an Environment with Multiple	0
Sybase Products	0
Uninstalling from an Environment with ECDA Options and DirectConnect for z/OS	8
Known Issues	
Known Issues for ECDA	9

Known Issues for ECDA Option for ODBC	10
Documentation Changes	12
ECDA Installer Logs Location	12
ECDA Option for Oracle	12
Enterprise Connect Data Access New Features	
Bulletin	12
Packaging Does Not Include SyBooks CD	12
Obtaining Help and Additional Information	13
Technical Support	13
Downloading Product Updates	13
Sybase Product and Component Certifications	14
Creating a MySybase Profile	14
Accessibility Features	
-	

## **Product Summary**

Enterprise Connect<sup>TM</sup> Data Access (ECDA) 15.7 is built on Open Client<sup>TM</sup> 15.0 and Open Server<sup>TM</sup> 15.0 ESD #25.

ECDA provides access to distributed data. See the *Enterprise Connect Data Access Overview Guide*.

The available ECDA options are:

- ODBC includes ECDA Option for DB2 UDB and the ECDA Option for Microsoft SQL Server
- ECDA options for Oracle

**Warning!** Sybase<sup>®</sup> does not supply back-end drivers with ECDA to provide connectivity to non-Sybase target databases. You must obtain a separate license from Microsoft, Data Direct, or other vendors, for the ODBC driver that is needed on the particular platform where ECDA is running.

There is a list of back-end drivers that Sybase supports on the Certification Web site at *http://certification.sybase.com*.

#### What's New in Version 15.7

There are no major features in this release, but some important changes have been implemented.

- Upgrade to JRE 7
- Platform operating system upgrade For detailed information on supported platforms, see the System Requirements section.
- Open Client/Server<sup>TM</sup> upgrade to version 15.7 ESD #4
- Upgrade to CSI 2.7 M2

## System Requirements for UNIX Platforms

Item	IBM AIX	Solaris	Linux	HP-UX Itanium
CPU	IBM RISC System/ 6000 (32-bit)	Solaris SPARC system (32-bit)	Intel-compatible (x 86)	Itanium Processor Family (IPF) (64-bit)
RAM	256MB, minimum	256MB, minimum	256MB, minimum	256MB, minimum
Storage	Minimum of 300MB, and at least 500KB for each locale you support	Minimum of 300MB, and at least 500KB for each locale you support	Minimum of 300MB, and at least 500KB for each locale you sup- port	Minimum of 300MB, and at least 500KB for each lo- cale you support
Platform require- ments	<ul><li>AIX 6.1</li><li>AIX 7.1</li></ul>	Solaris SPARC 10	<ul><li>Linux RHEL 6.0</li><li>SuSE 11.0</li></ul>	HP-UX 11.31

Minimum hardware and software requirements for specific ECDA products.

ODBC driver: ODBC 3.5-compliant driver to access the targeted database, on the same platform where you are using ECDA for ODBC (DB2 UDB target DBMS).

**Note:** (For AS/400 only) If the target database is an iSERIES server running at operating system level 5VR2M0 or 5VR3M0, install the Program Temporary Fix (PTF) SF99502:520 DB2 UDB for iSERIES.

## System Requirements for DirectConnect Manager

Minimum system requirements for DirectConnect<sup>TM</sup> Manager.

Item	IBM AIX	Solaris	Linux	HP-UX Itani- um
СРИ	IBM RISC Sys- tem/6000	Solaris SPARC system	Intel-compatible	Itanium Processor Family (IPF)
RAM	256MB minimum	256MB mini- mum	256MB minimum	256MB minimum

ltem	IBM AIX	Solaris	Linux	HP-UX Itani- um
Storage	75-100MB mini- mum	75-100MB mini- mum	75-100MB mini- mum	250MB minimum
Platform require- ments	<ul><li>AIX 6.1</li><li>AIX 7.1</li></ul>	Solaris (Sparc) 10	<ul> <li>Linux RHEL 6.0</li> <li>SuSE 11.0</li> </ul>	HP-UX 11.31

## **Product Compatibilities**

ECDA is compatible with other Sybase products.

- Sybase Open Client 15.0 ESD #25 and later
- Adaptive Server<sup>®</sup> Enterprise version 15.0 and later
- Replication Server® 15.7.1 SP100 and later
- $jConnect^{TM}$  for  $JDBC^{TM}$  for 6.0 and later
- DirectConnect Manager 15.7 and later

#### Compatibility with DirectConnect for z/OS 15.0.1

DirectConnect for z/OS 15.0.1 and ECDA Option for ODBC cannot be installed in the same directory.

If you are upgrading ECDA 15.0.1 to 15.7, and have installed DirectConnect for z/OS 15.0.1 and ECDA Option for ODBC in the same directory, you must:

- Install DirectConnect for z/OS 15.0.1 and ECDA Option for ODBC in separate directories.
- Assign a new port number and name to the new DirectConnect server.

# Installation and Configuration

Review the new installation and configuration instructions for ECDA version 15.7.

## **Special Installation and Configuration Instructions**

The special installation instructions either replace existing documented instructions or are new installation instructions that were created after the release of ECDA version 15.7.

#### ECDA 15.7 Installation on IBM AIX 6.1

ECDA 15.7 installer fails on AIX 6.1. The error occurs when ECDA installer creates a new process and calls the DCWizard installer. This is caused by attempting to install the product as ROOT or with a ROOT enabled account. For security reasons, ECDA does not support installation of the product as ROOT. Use a non-ROOT account to install and run the product.

#### **Downloading the Oracle Instant Client Libraries Package**

Obtain the Oracle Instant Client libraries from the Oracle Web site and install them into the DCO directory. As of version 15.0.1, ECDA Option for Oracle no longer ships with Oracle client libraries.

- 1. Create a temporary directory.
- 2. Go to the Oracle Web site at *http://www.oracle.com*.
- 3. Select Downloads > Databases > Oracle Instant Client.
- 4. Select the Instant Client for your platform.

Platform	Download Link	
HP-UX Itanium	Instant Client for HP-UX Itanium (64-bit)	
IBM AIX	Instant Client for AIX5L (32-bit)	
Linux	Instant Client for Linux x86	
Solaris SPARC	Instant Client for Solaris Operating System (SPARC) (32-bit)	

- **5.** Read and accept the OTN Development and Distribution License Agreement for Instant Client.
- 6. Select Version 10.2.0.5 and click:

Platform	Package
HP-UX Itanium	basic-10.2.0.5.0-hpux-ia64.zip
IBM AIX	basic-10.2.0.5.0-aix-ppc32.zip
Linux	basic-10.2.0.5.0-linux.zip
Solaris SPARC	basic-10.2.0.5.0-solaris-sparc32.zip

- 7. Log in to the Oracle download site.
- 8. Download and extract the Instant Client package into the temporary directory.
- **9.** To extract the Instant Client package, download and use the unzip utility at *https://updates.oracle.com/unzips/unzips.html*.

#### Installing Oracle Client Libraries in to the DCO Directory

Install the Oracle Instant Client libraries in to the DCO directory.

#### Prerequisites

Install ECDA Option for Oracle.

#### Task

1. Prepare the DCO directory for the Oracle Instant Client libraries:

```
cd <install_dir>/DCO-15_0/lib
rm libclntsh.so
ln -s libclntsh.so.10.1 libclntsh.so
```

2. Copy the Oracle Instant Client libraries into the DCO directory:

```
cd <install_dir>/DCO-15_0/lib
cp <tempdir>/instantclient 10 2/*.
```

where tempdir is the directory to which you extracted the Oracle Instant Client libraries.

3. Restart the DCO or use the DCWizard utility to configure the DCO for a new installation.

#### **ECDA for Oracle - StartServer on Linux**

If starting an ECDA Option for Oracle server on Linux using the startserver binary, ensure that these 32-bit packages are installed on the system:

- glibc-2.5-18
- libgcc-4.1.2-14.el5
- libstdc++-4.1.2-14.el5
- libaio-0.3.106-3.2
- libpam.so.0.81.5

#### DCManager on AIX 7.1 on ECDA for Oracle and ECDA for ODBC

There is a known issue with the installer running on IBM AIX 7.1 in which the DCManager plug-in fails to register with Sybase Central<sup>TM</sup>. As a result, Sybase Central can be started but no DCManager functionality is available.

To check if you have this issue, run the installer to completion, then check the \$SYBASE/ DCM-15 7/InstallAndRegister.log file for this sort of error:

```
SYBASE_directory/shared/JRE-6_0_SR1_64BIT//lib/ppc64/default/
libj9vm24.a.
0509-026 System error: A file or directory in the path name does not
exist.
libjvm.so failed to load: j9vm24
```

**Note:** The log file may also display "Registration Successful!", but if you start Sybase Central and do not see the DCM plug-in, enter these in the command line:

- \$SYBASE/DCM-15\_7/UnRegister\_DCManager\_15\_7.sh
- \$SYBASE/DCM-15\_7/Register\_DCManager\_15\_7.sh

Restart Sybase Central to see the available DCManager functionality.

#### HP-UX Itanium Runtime Libraries Missing on ECDA for ODBC

DirectConnect requires the GCC C++ runtime libraries installed in your system. If DirectConnect fails to start due to libstdc++.so inability to do so, install the GCC C++ runtime libraries on your machine and include its library directory in the LD\_LIBRARY\_PATH of your shell.

If you use the <code>\$SYBASE/DC-15\_0/DC\_SYBASE.csh</code> script to set your environment, append the GCC C++ library directory to the LD\_LIBRARY\_PATH setting in that file. For example, an edited LD\_LIBRARY\_PATH in DC\_SYBASE.csh may read as follows:

```
setenv LD_LIBRARY_PATH ${SYBASE}/DC-15_0/lib:${SYBASE}/
DC-15_0/connectivity/OCS-15_0/lib:${SYBASE}/15_0/
connectivity/OCS-15_0/lib3p:/usr/lib/lwp:/usr/lib:$
{SYBCSI_PROVIDER_DIR}:${LD_LIBRARY_PATH}:/opt/hp-gcc-4.2.1/
lib/hpux64
```

#### **ODBC Back-End (Target-Side) Drivers**

Separate license files for non-Sybase target databases are required to use ECDA Option for ODBC.

Sybase does not supply drivers with ECDA Option for ODBC to provide connectivity to non-Sybase target databases, such as DB2 UDB and Microsoft SQL Server. You must obtain a separate license from IBM, Microsoft, Data Direct, or other vendors, for the ODBC driver that is needed on the particular platform where ECDA Option for ODBC is running.

Note: Version 9.1 of the IBM 64-bit ODBC driver has a new file name: libdb20.so.

#### **Migration Utilities**

Due to directory structure changes, you cannot use utilities to migrate to a newer installation.

For example, ECDA 12.x to an ECDA 15.x.

#### **Editing the interfaces File**

Run the ECDA related execution scripts to change the local version of interfaces to the global version if you are not using **dsedit**.

The interface file is located:

• Global interfaces file is found in <install\_dir>/interfaces

 Local interfaces file is found in <install\_dir>/DC-15\_0/connectivity/ interfaces

The local version is a soft link to the global version.

#### Configuring the Data Source for DB2 UDB Targets

Configure the datasource to connect to DB2 UDB targets.

(CR #397278) When you configure the datasource to connect to DB2 UDB targets, (for DataDirect only) specify the parameters in the **Bind** parameter:

**Package Collection** – Enter the collection or location name where the driver creates the bind packages and searches for them when required. The default is NULLID.

• **Package Owner** *(optional)* – Enter the AuthID assigned to the package. The DB2AuthID must have authority to execute all the SQL commands in the package.

## Installing Multiple Products on the Same Machine

Complete several tasks before you install any Sybase software into a directory in which Sybase software is already installed.

- 1. Create backup of the existing installation directory and, if possible, the environment var iable settings and registry.
- 2. Overwrite older existing files.

On all platforms, when you install Sybase products into a directory that contains other S ybase products, the installation program overwrites existing files with the same name. H owever, if the files on the system are newer than the ones being installed, the installer pr ompts you to specify whether or not to overwrite the existing files. In most instances, yo u want the newer version of the files on the system and should choose not to overwrite t hem.

3. Reset system variables.

As a result, any Sybase products that were on the system before and were configured to run as Windows services may no longer run automatically and may not be manageable t hrough the Control Panel service controls. To correct this problem, either:

- Run the environment scripts, such as SYBASE.csh, to set the variables correctly for the previously installed products before running it, or,
- Create scripts that set the environment and run the product.

# Uninstallation from an Environment with Multiple Sybase Products

Uninstalling Sybase products from environments that contain multiple Sybase products may affect the operation of the remaining Sybase products.

Sybase products frequently share modules or files, such as connectivity files in the Sybase OCS-15\_0 directory, Java Virtual Machine (JVM) files in the shared or shared-1\_0 directory, language modules, and Sybase Software Asset Management (SySAM) files.

#### Shared Files Between Products

When uninstalling Sybase products from a directory that contains multiple Sybase products, be aware that you may remove files that other products require. Therefore, if you uninstall one of the products that share files, you must take care to not remove files that the remaining products may require.

# Uninstalling from an Environment with ECDA Options and DirectConnect for z/OS

Uninstall products in the reverse order of installation. You must do this because of a problem with the uninstallation procedure.

Note: After uninstalling, you may need to manually delete files that have not been removed.

## **Known Issues**

Review the known issues and provided workarounds.

Find issues by Change Request (CR) number.

**Note:** For the most current information regarding the status of the known issues, refer to the latest ESD README file.

#### Known Issues for ECDA

The general issues that apply to all ECDA products.

CR#	Description	
-	Admin Service user.pwd file	
	The Admin Service of ECDA 15.0 and later has been changed from to read and write encrypted passwords to using the user.pwd file. Earlier versions of user.pwd files are not supported with ECDA 15.0 and later result in administrator login failures.	
	<b>Workaround:</b> Reenter the administrator IDs and passwords from earlier installations to the new Admin Service.	
-	Service name redirection default value	
	The default server.cfg file does not give snrf.tbl as the default value.	
	Workaround: If you are using the default snrf.tbl, enter this line in the server.cfg file under the Client Interaction:ServiceRedirec-tionFile=snrf.tbl	
-	(HP Itanium only) InstallShield errors	
	On HP-UX Itanium, you can safely ignore these error messages, which you may see during installation:	
	<ul> <li>When in GUI mode, the installation procedure displays gif file not found messages in the console before the GUI interface appears.</li> <li>When you create a response file for silent installations, the installation procedure displays Illegal character '8' in encod- ing name. These error messages have no effect on the functionality of the response file created and on a successful silent installation. Also, some of the comments inserted into the response file are not formatted correctly and can be ignored.</li> </ul>	
	Workaround: None.	
-	(Linux only) Installation program may result to core dump	
	On Linux, if the LD_LIBRARY_PATH environment variable includes the ECDA lib directory path of an earlier ECDA installation, the new installation session performs a core dump.	
	Workaround: Unset the LD_LIBRARY_PATH environment variable before installing.	

#### Table 1. ECDA General Issues

CR#	Description
-	Uninstall function not removing all ECDA files
	When you use the InstallShield, the uninstall program does not remove all the ECDA server files. Be sure to verify files and manually remove any that remain.
	<b>Note:</b> Uninstalling ECDA leaves the SYSAM-2_0 and UAF components, along with various logs and configuration files that were not created during installation time.

## Known Issues for ECDA Option for ODBC

Known issues that pertain to ECDA Option for ODBC.

CR#	Description
-	Service information added to a local sql.ini file
	If you add ECDA service information to a local sql.ini file, you see this message during start-up:
	CT-LIBRARY error: ct_connect(): directory service layer: internal directory control layer error: Requested server name not found.
	You must add ECDA service information to the global sql.ini file instead of the local sql.ini file. The global sql.ini file is located in <in-stall_dir>\ini\sql.ini. The local sql.ini file is located in <install_dir>\DC-15_0\connectivity}\ini \sql.ini.</install_dir></in-stall_dir>
	Workaround:None.
474143	Warning sent for ODBCDriverManager property
	At start-up, ECDA Option for ODBC issues a warning that the ODBCDriver- Manager property is not set. ECDA issues this message because it uses the default configuration property, unixODBC, and does not find a value for this property in the dcany.cfg file. Because this message does not affect oper- ation, you can safely ignore it.
	Workaround: None.

Table 2. ECDA Option for ODBC Issues

CR#	Description
-	Express transfer char datatypes
	Express transfer does not support the transfer of char datatypes to and from decimal datatypes.
	Workaround: Convert query datatypes from char to decimal datatypes in the transfer query statement using the SQL CAST function.
-	Express transfer text datatypes
	Express transfer does not support the transfer of text datatypes to and from char datatypes.
	<b>Workaround:</b> Convert query datatypes from text to char datatypes in the transfer query statement using the SQL CAST function.
-	Issues pertaining to ECDA Option for ODBC accessing the DB2 UDB da- tabase.
	Host name as IP address causes failure on Solaris
	Specifying the host name as the IP Address causes a failure on some Solaris systems.
	Workaround: Specify the IP Number as the IP Address.
-	CLOB and BLOB datatypes
	CLOB data is limited to 32K and the BLOB datatype is not supported.
	Workaround: Use the DirectConnect for z/OS Option.
-	(Microsoft SQL Server) NCHAR and NVARCHAR datatype support
	Microsoft NCHAR and NVARCHAR datatypes are not supported but are trans- lated to the single-byte character set of the operating system. Unicode characters that cannot be mapped are translated to a default character for the operating system.
	Workaround: None.
275506	Issues relating to ECDA Option for ODBC accessing Microsoft SQL Server.
	Adaptive Server/Component Integration Services (CIS) is not correctly mapping the timestamp datatype, resulting in insert failures.
	Workaround: None.
425343	Read-only cursors fail to return error messages
	An update of read-only cursors fails to return errors against Microsoft SQL Server 2005.
	Workaround: None.

# **Documentation Changes**

Read about updates, corrections, and clarifications to the documentation released with EDCA.

#### **ECDA Installer Logs Location**

ECDA installation logs are located in different directories.

- ECDA installation log \$SYBASE/log.txt
- DC Wizard installation log
  - \$SYBASE/DCO-15\_0/DCW\_install.log
  - \$SYBASE/DC-15\_0/DCW\_install.log
- Other logs \$SYBASE/logs

#### **ECDA Option for Oracle**

Change in functionality in this version of ECDA Option for Oracle.

ECDA for Oracle no longer ships with Oracle Client libraries. Obtain the Oracle Instant Client libraries from the Oracle Web site at *http://www.oracle.com*.

The Oracle Instant Client libraries do not contain XA functionality; therefore, DirectConnect for Oracle (DCO) no longer supports two-phased commit functionality. When the **two\_phase\_commit** option is set to 1, a message indicates that the feature has been deprecated.

## **Enterprise Connect Data Access New Features Bulletin**

The New Features Bulletin is not available for ECDA 15.7 release.

#### Packaging Does Not Include SyBooks CD

Enterprise Connect Data Access does not include the SyBooks<sup>™</sup> CD. To learn more about your product, use the Sybase Getting Started CD and the Sybase Product Documentation Web site.

# **Obtaining Help and Additional Information**

Use the Sybase Getting Started CD, Product Documentation site, and online help to learn more about this product release.

- The Getting Started CD (or download) contains release bulletins and installation guides in PDF format, and may contain other documents or updated information.
- Product Documentation at *http://sybooks.sybase.com/* is an online version of Sybase documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. In addition to product documentation, the Web site also has links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, Community Forums/Newsgroups, and other resources.
- Online help in the product, if available.

To read or print PDF documents, you need Adobe Acrobat Reader, which is available as a free download from the *Adobe* Web site.

**Note:** A more recent release bulletin, with critical product or document information added after the product release, may be available from the Product Documentation Web site.

## **Technical Support**

Get support for SAP® products.

If your organization has purchased a support contract for this product, then one or more of your colleagues is designated as an authorized support contact. If you have any questions, or if you need assistance during the installation process, ask a designated person to contact Technical Support as specified in your contract:

- Sybase Technical Support or the Sybase subsidiary in your area
- SAP Technical Support

Customers with an SAP support contract can obtain support for this product at the SAP support site, *http://service.sap.com/sybase/support*. You can also find information about Sybase support migration at this location (login may be required).

Customers with a Sybase support contract can obtain support for this product at *http://www.sybase.com/support* (login required).

## **Downloading Product Updates**

Get maintenance releases, support packages and patches, and related information.

- If you purchased the product directly from Sybase or from an authorized Sybase reseller:
  - a) Go to http://www.sybase.com/support.
  - b) Select **Support > EBFs/Maintenance**.
  - c) If prompted, enter your MySybase user name and password.
  - d) (Optional) Select a filter, a time frame, or both, and click Go.
  - e) Select a product.

Padlock icons indicate that you do not have download authorization for certain EBF/ Maintenance releases because you are not registered as an authorized support contact. If you have not registered, but have valid information provided by your Sybase representative or through your support contract, click **My Account** to add the "Technical Support Contact" role to your MySybase profile.

- f) Click the **Info** icon to display the EBF/Maintenance report, or click the product description to download the software.
- If you ordered your product under an SAP contract:
  - a) Go to *http://service.sap.com/swdc* and log in if prompted.
  - b) Select **Search for Software Downloads** and enter the name of your product. Click **Search**.

#### **Sybase Product and Component Certifications**

Certification reports verify Sybase product performance on a particular platform.

To find the latest information about certifications:

- For partner product certifications, go to http://www.sybase.com/detail\_list?id=9784
- For platform certifications, go to *http://certification.sybase.com/ucr/search.do*

#### **Creating a MySybase Profile**

MySybase is a free service that allows you to create a personalized view of Sybase Web pages.

- 1. Go to http://www.sybase.com/mysybase.
- 2. Click Register Now.

## Accessibility Features

Accessibility ensures access to electronic information for all users, including those with disabilities.

Documentation for Sybase products is available in an HTML version that is designed for accessibility.

Vision impaired users can navigate through the online document with an adaptive technology such as a screen reader, or view it with a screen enlarger.

Sybase HTML documentation has been tested for compliance with accessibility requirements of Section 508 of the U.S Rehabilitation Act. Documents that comply with Section 508 generally also meet non-U.S. accessibility guidelines, such as the World Wide Web Consortium (W3C) guidelines for Web sites.

**Note:** You may need to configure your accessibility tool for optimal use. Some screen readers pronounce text based on its case; for example, they pronounce ALL UPPERCASE TEXT as initials, and MixedCase Text as words. You might find it helpful to configure your tool to announce syntax conventions. Consult the documentation for your tool.

For information about how Sybase supports accessibility, see the Sybase Accessibility site: *http://www.sybase.com/products/accessibility*. The site includes links to information about Section 508 and W3C standards.

You may find additional information about accessibility features in the product documentation.

Obtaining Help and Additional Information