

# Release Notes: Progress® DataXtend™ CE for C# version 3.1.X

Progress® DataXtend™ CE v3.1.X (formerly Persistence® EdgeXtend™) is a general availability release for the Microsoft® Windows® operating system. Progress recommends that you use a general availability release for the deployment of your production systems. If you have questions about this release, please contact a Progress professional services consultant or your sales representative. Progress will support this release (version 3.1.X) at least until April 2006.

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## What Does the Product Include?

DataXtend CE for C# is available in Professional and Enterprise editions. The Professional edition provides O/R mapping, requires no additional deployment fees, and includes the following:

- Development tools:
  - DataXtend™ Workbench
  - DataXtend™ Add-Ins for Rose
- DataXtend CE runtime libraries
  - Configuration for database connection pools
- Online documentation set

The Enterprise edition provides O/R mapping, caching, and cache synchronization. Per-CPU deployment licenses are required for testing and deployment. The Enterprise edition includes the following:

- Development tools:
  - DataXtend™ Workbench
  - DataXtend™ Add-Ins for Rose
- DataXtend CE runtime libraries, including configuration for:
  - Database connection pooling
  - Caching and cache clearing
  - Transaction modes
  - Synchronization
- Online documentation set

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## New in this Release

Persistence® EdgeXtend™ is now Progress® DataXtend™ CE. This release of DataXtend includes the following new features:

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**Note:** Note: To migrate existing applications, recompile and re-link against new libraries.

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- The Workbench features a new streamlined interface.
- The new CRUD sample shows how to Initialize DataXtend runtime and access and update persistent mapping objects.
- The Database Explorer uses bundled JDBC drivers to provide drag-n-drop functionality. All of the drivers are provided by DataDirect except MySQL, which comes from MySQL.
- Evaluation Guide  
Improved Evaluation Guide PDF is less than twenty-five pages and allows you to work through the samples in the order that you choose.

- Cache Synchronization enhancements include:
  - New Synchronization Messenger for Sonic MQ
  - Improved Guaranteed Synchronization performance for Oracle AQ.
  - New Database-to-Cache Synchronization feature. The Forwarding Engine ensures that your DataXtend application learns of non-DataXtend updates to the cluster.

See the product documentation for information on using these new features.

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## Supported Configurations

This version of DataXtend CE for C# is supported on Microsoft® .NET Framework version 1.1.4322. Table 1 lists the supported operating systems, compilers, and database client libraries.

**Table 1. Platforms Available**

Hardware	OS	Visual Studio	Database Client Libraries	Messaging (for cache synchronization)
Intel	Windows 2003 Windows XP	.NET 2003 version 1.1.4322	<ul style="list-style-type: none"> <li>● IBM DB2 8.1</li> <li>● IBM DB2 8.2</li> <li>● Informix 2.8</li> <li>● SQL Server 2000</li> <li>● MySQL 4.1</li> <li>● Oracle 9i 2.0</li> <li>● Oracle 10g</li> <li>● Sybase 12.5.3</li> </ul>	<ul style="list-style-type: none"> <li>● Oracle 9i 2.0 AQ</li> <li>● Oracle 10g AQ</li> <li>● Rendezvous 7.3*</li> <li>● SonicMQ 6.1</li> </ul>

\* To use the Tibco messenger contact your sales representative. or contact Professional Services.

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## Procedure for Upgrading

If you used a previous release of EdgeXtend (now DataXtend CE), before installing this release:

- Delete any copies of sample applications that you might have made.
- Delete the **license.dat** file and get a new license from Progress.  
You can request a license by sending e-mail to [customerservices-realtime@progress.com](mailto:customerservices-realtime@progress.com).
- Uninstall the previous version of EdgeXtend for C#.
- Install the new software.
- Recompile.
- Re-link against existing libraries.

For any projects that reference **Persistence.dll** complete the following steps to re-link your projects:

1. In the Solution Explorer select the project you want to re-link.
2. Expand References.
3. Right click on Persistence Component and choose delete from the context menu.

The reference is now removed.

4. Select Add References from the context menu.
5. Click Browse in the dialog box.
6. Navigate to: \Program Files\Progress\DataXtendCE\_C#xxx\lib\Persistence.dll
7. Click Open.

When you rebuild your project the reference to the new **Persistence.dll** is now added.

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## Customer Care Center

For additional information on Progress Real Time products, speak with your distributor or sales representative. For sales contact information, see this Web page: [www.progress.com/realtime/company/worldwide\\_offices/](http://www.progress.com/realtime/company/worldwide_offices/)

For license updates email [customerservices-realttime@progress.com](mailto:customerservices-realttime@progress.com).

To contact support, you must have a current customer support contract. To e-mail support, you must include your serial number in the subject line.

<b>e-mail:</b>	<a href="mailto:realttime-support@progress.com">realttime-support@progress.com</a>
<b>Internet:</b>	<a href="http://www.progress.com/realtime/techsupport/">www.progress.com/realtime/techsupport/</a>
<b>North America</b> (9AM to 8PM EST M - F):	+1 781 280 4005
<b>EMEA</b> (9AM to 5PM M - F):	<a href="http://www.progress.com/realtime/techsupport/contact/emea_phone_numbers/">www.progress.com/realtime/techsupport/contact/emea_phone_numbers/</a>
<b>Japan</b> (9AM to 5:30PM M - F):	+81 (0)3 3556 8360
<b>Australia Only:</b>	+1 800 064 797
<b>Australia &amp; New Zealand</b> (9AM to 5PM Sydney time, M - F):	+61 (0)2 4382 4408

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## Troubleshooting Checklist

If you encounter problems with DataXtend CE, Progress support personnel will ask you the following questions. You may find it helpful to answer them yourself, before calling for help.

1. Is your operating system and version supported? (See [“Supported Configurations”](#) on page 3 above.)
2. Is the .NET framework you are using supported? See [“Supported Configurations”](#) on page 3 above.)
3. Does the version of the Progress product you are using have any known issues which fit the behavior? (See [“Known Problems”](#) on page 7.)

4. Have you run the proper environment setup scripts? Refer to the documentation for information on these.
5. Do your library and system environment variables contain the correct information?
6. Is your database and version supported? (See [“Supported Configurations”](#) on [page 3](#) above.)

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## Fixed Problems

- 5887 The DataXtend workbench contains a "Generate code" entry in the explorer context menu for .per files that does not invoke the code generation wrapper.
- 5899 The PDOFactory.Create() method called with a PDO collection argument is not setting the passed relationship. Relationships are not established after the Create call .
- 5900 PDOs set to PermitClearing are not garbage collected and cleared from the cache
- 5901 Passing null to a relationship set leads to undefined behavior
- 5950 Encountering a NullReferenceException when attempting a relationship transversal
- 5952 Persistence.dll needs to be unregistered from Windows registry during Uninstall
- 5969 EdgeXtend missing bad license file error message
- 6008 Auto config TCP cache sync messenger can't re-establish connection to a re-started partner cache.
- 6114 Dll Not Found Exception when using EdgeXtend as a web service with cache sync enabled
- 6161 Cache synced EdgeXtend web services encounter problems initializing the TCP messenger on reset
- 6165 error CS1034: Compiler limit exceeded: Line cannot exceed 2046 characters
- 6175 PDO exception from concurrent FindByPrimaryKey()
- 6184 Memory leak in PDOPersistentObject destructor
- 6188 Race condition during WrapManager::WrapObject()

- 6189 **Correct memory leaks due to mishandling of memory allocated via StringToHGlobalAnsi**
- 6190 **Clean up the exception handling for exceptions generated in the unmanaged layer and propagated to the managed.**
- 6207 **If ServiceAdmin.Stop() is not invoked first ServiceAdmin.Shutdown() will exit with errors**
- 6210 **The C# default clearing policy should be set to "Prohibit" for consistency**
- 6220 **EdgeXtend C# does not generate stored procedure parameter order in comments**

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## Known Problems

The following problems are known to exist in EdgeXtend for C# (now DataXtend CE):

- 5870 **FindByPrimaryKeyWithOptions with byte[] parameter is missing**  
For classes where you define the primary key attribute Persistence Primitive type as OID or Binary, code generation does not produce a FindByPrimaryKeyWithSource() method.
- 5876 **The AttributeNull for non-nullable attributes is getting generated on the <Class>.cs**  
Code generation produces an AttributeNull setter for non-nullable attributes in <Class>.cs.  
**Workaround:** Do not use this property.
- 5888 **Attribute named result leads to compile errors**  
If you name an attribute "result" in your Persistence project, you will experience compiler errors.  
**Workaround:** Do not use "result" as an attribute name.
- 5909 **OptimisticControlException should be thrown when the error code from the core cache is an OPTIMISTIC\_FAILURE.**  
OptimisticControlException is a newly defined exception but is currently not used to identify exceptions that are due to optimistic control failures.

**5940 Not using source suffix value for generated files**

Modifications you make in the Persistence project to change the generated file suffix are not accepted. Instead, all source files end with the ".cs" suffix (which is the standard convention).

**5942 Can't change name of generated files**

You should be able to override the file name for generated class file with the EdgeXtend for C# product. The FileNameRoot value for a PersistentClass within the .per file should determine the root name of the generated file. The ProjSourceSuffix value should determine the suffix.

**6000 If Firebird setup fails during installation, no warning to the user is generated**

On occasion, during installation of EdgeXtend for C#, the Firebird database setup will fail without warning. Although the failure may happen for numerous different reasons, the installer never provides a warning indication to the user that the failure occurred.

**Workaround:** If the sample application fails to access the Firebird database for some reason, open an EdgeXtend command prompt and run:

```
%PERSISTENCE_HOME%\bin\private\bin\setupfb remove
```

to remove the current configuration and then run:

```
%PERSISTENCE_HOME%\bin\private\bin\setupfb install
```

to reinstall the Firebird database manually

**6007 Manually configured TCP Messenger connections do not cleaned up properly on partner termination**

If the TCP cache sync messenger is manually configured, when a cache sync partner shuts down after establishing communication with a partner cache, the TCP cache sync messenger does not clean up the partner connection. The messenger will continually attempt to connect to that partner with every message.

**6013 Size value ignored when defining a union base with a typecode data type of string**

The length always defaults to 10.

**Workaround:** After defining the attribute go back and change it again.

**6020 TCP messenger fails with port in use error**

When concurrently starting two cache instances configured to sync using the TCP messenger in auto discovery mode on the same node, one instance may fail startup, reporting port already in use.

**Workaround:** Stagger cache instance startup when running multiple cache instances on the same node configured to use the TCP messenger in auto discovery mode.

**6021 Potential out of memory condition when utilizing TCP Sync Messenger**

TCP Sync Messenger configured in manual mode (auto discovery disabled, each endpoint enumerated) can result in out of memory condition resulting in unexpected cache instance behavior and potentially crash if an endpoint does not exist.

**Workaround:** Remove unnecessary cache sync endpoints from TCP sync messenger configuration. Always start and maintain all configured cache cluster instances, restarting failed cache instances as promptly as possible.

**6024 TCP sync msngr config server-link element not optional**

The server-link element should not be required except in the circumstance where a ps-config.xml file defines two cache instances running on the same node. However, an incorrect check is being made and startup fails.

**Workaround:** Specify a server-link element in all endpoint definitions. Value does not have to match server name in configuration file.

**6030 AttributeNull method generated for not NullAllowed attribute**

If an attribute is not NullAllowed (i.e. is Required), an AttributeNull method is still generated.

**6097 Error message printed when using SQL Server 2000**

EdgeXtend prints the following error message when the ps-config.xml file is configured to use SQL Server. It seems that the error message does not affect subsequent functioning of EdgeXtend.

It is possible that this message is not an error message but an informational message. However, EdgeXtend prints it out as an ODBC error message.

```
com.persistence.container.ContainerException: ContainerException = name:
DATASOURCE_ERR, description: ODBC Data Source Error: 01S02 --
```

```
Message: [Microsoft][ODBC SQL Server Driver]Option value changed, category:
10320, code: 12001, database code: 1, index: 0.
```

**6225 All Oracle errors during PDO operations are translated to PDODuplicateKeyException**

A PDODuplicateKeyException is thrown with Oracle when this exception is inappropriate.

**6254 The Rose Add-Ins have a bad link to the documentation from the Help menu**

The link to Validation errors does not work. The validation information is available from the other links, you can find the links by searching the HTML.