Roundtable[®] / Progress Dynamics Migrating from Progress Dynamics 2.1B01 to OpenEdge 10.1A

Copyright © 2006 by Ledbetter & Harp LLC

Roundtable® software products are licensed by Tugboat Software Inc. and copyrighted by Ledbetter & Harp LLC, with all rights reserved. This document is also copyrighted and all rights are reserved. This document may not, in whole or in part, be copied, photocopied, translated, or reduced to any electronic medium or machine-readable form without prior consent, in writing, from Tugboat Software or Ledbetter & Harp LLC.

The information in this document is subject to change without notice, and neither Tugboat Software, nor Ledbetter & Harp LLC assume responsibility for any errors that may appear in this document.

March 2006

Roundtable® is a registered trademark of Ledbetter & Harp LLC.

Microsoft Windows is copyrighted by Microsoft Corporation. Microsoft is a registered trademark of Microsoft Corporation. Windows is a trademark of Microsoft Corporation.

Progress® and OpenEdge ® are registered trademarks of Progress Software Corporation.

UNIX is a registered trademark of The Open Group in the United States and other countries.

All company and product names are the trademarks or registered trademarks of their respective companies.

Tugboat Software 20301 Birch Street Suite 202 Newport Beach, CA 92660-3112

Version: 1.1

Last Updated: March 2006

Table of Contents

1.2 MIGRATING A2 ASSUMPTIONS.3 PREREQUISITES3.1 PRODUCTS	XX AND 10.XX WORKSPACES	6 6
1.2 MIGRATING A2 ASSUMPTIONS.3 PREREQUISITES3.1 PRODUCTS	WORKSPACES	6 6
3 PREREQUISITES 3.1 PRODUCTS		
3 PREREQUISITES 3.1 PRODUCTS		
3.1 PRODUCTS		7
		/
211 Drogram		7
S.I.I FIUGIESS	1E	7
3.1.2 Dynamic	.1B01	7
	10.1A	
	TSMS 9.1D	
	TSMS 10.0A	
	TSMS 10.1A	
	CUTS AND CONFIGURATION FILES	
3.2.1 Roundtal 3.2.2 Roundtal	9.1D, Progress 9.1E and Dynamics 2.1B01 10.x and OpenEdge 10.1A	ەە
	e shortcuts	
	o stortouto	
	9.1D, Progress 9.1E and Progress Dynamics 2.1B01	
	10.0A and OpenEdge 10.1A	
3.4 DYNAMICS IC	ONFIG.XML FILE	11
4 NEW 092DYN-D	RECEIPT WORKSPACE	12
	AD NEW ROUNDTABLE PARTNER SITE	
4.1.1 Unipack t	Partner Site Deployment packagereceipt workspace	13
	r Site Deployment	
	Update Schema	
I	orkspace	
	connect databases	
	lb	
4.1.7 Compile	workspace	21
5 ADDING A NEW	.1A WORKSPACE	23
5.1 CONFIGURAT	N SETUP	22
	OPENEDGE DEVELOPMENT WORKSPACE	
	CE SOURCES AND IMPORT	_
	ramework Workspace Sources	
,	and framework customization Workspace Sources	
	oplication and framework customizations	
5.4 UPDATING C	ГОМ VARIANTS – PART 1	30
5.4.1 New Ope	dge custom Products and Modules	30
	w object variants	
	variant workspace sources	
	ORKSPACE DATABASES	
	base	
•	tabasedatabasas	
	databaseservers	
	– Phase 1	

	5.7 ROUNDTABLE UPDATE SCHEMA	.37
	5.8 SELECTIVE COMPILE	.38
	5.9 DCU UPGRADE – PHASE 2	.39
	5.9.1 Performing DCU Phase 2	39
	5.10 CUSTOM VARIANTS – PART 2	
	5.10.1 SCM Xref	
	5.10.2 Review Custom Variants	
	5.10.3 Check in Custom Variants	
	5.11 REGISTER MIGRATED APPLICATION OBJECT AND DATA CHANGES	
	5.12 RELEASE	
6	MIGRATING WORKSPACES TO 10.1A	.41
	6.1 DISABLE INTEGRATION HOOKS	11
	6.2 CHANGE WORKSPACE PATH	
	6.3 FRAMEWORK WORKSPACE SOURCES	
	6.3.1 Dynamics Framework Workspace Sources	
	6.3.2 Import from New Source	
	6.3.2.1 Include all objects	
	6.3.2.2 Exclude Objects with Custom Variants	44
	6.3.3 Import	
	6.4 UPDATING CUSTOM VARIANTS – PART 1	15
	6.4.1 New OpenEdge custom Products and Modules	.45 15
	6.4.2 Creating new object variants	
	6.5 CONVERT WORKSPACE DATABASES	
	6.5.1 ICFDB and Application databases	
	6.5.2 Temp-db database	
	6.5.3 Application databases	
	6.5.4 Database Servers	
	6.7 Re-enable Integration Hooks	
	6.8 ROUNDTABLE UPDATE SCHEMA	
	6.9 SELECTIVE COMPILE	
	6.10 DCU UPGRADE – PHASE 2	
	6.10.1 Phase 2 manual preparation	
	6.10.2 Performing DCU Phase 2	
	6.11 CUSTOM VARIANTS – PART 2	
	6.11.1 SCM Xref	
	6.11.2 Review Custom Variants	
	6.11.3 Check in Custom Variants	
	6.11.4 Clear Old Products and Modules	
	6.12 REMOVE OLD FRAMEWORK OBJECTS	
	6.13 Release	.53
7	FOLLOW-ON WORKSPACES	53
•		
	7.1 DISABLE INTEGRATION HOOKS	
	7.2 Change Workspace Path	
	7.3 UPDATE WORKSPACE SOURCES	
	7.4 WORKSPACE IMPORT	
	7.4.1 Include all objects	
	7.5 CONVERT WORKSPACE DATABASES	
	7.5.1 ICFDB and Application databases	.54
	7.5.2 Temp-db database	.54
	7.5.3 Application databases	
	7.5.3.1 Database Servers	55
	7.5.3.2 Set up OpenEdge 10.1A servers for the databases	
	7.6 DCU UPGRADE – PHASE 1	

7.7	RE-ENABLE INTEGRATION HOOKS	55
7.8	ROUNDTABLE UPDATE SCHEMA	
7.9	SELECTIVE COMPILE	
7.10	DCU UPGRADE – PHASE 2	
7.11	CUSTOM VARIANTS FROM SOURCE	
	11.1 SCM Product Module Xref	
	11.2 Clear Old Product Modules	
7.12	RELEASE	58
8 CC	DNVERTING THE ROUNDTABLE REPOSITORY	58
8.1	MIGRATING THE ROUNDTABLE 9.1D REPOSITORY TO 10.0A	58
	1.1 Backup	58
8.	1.2 Roundtable Setup	58
8.2		
	2.1 Shortcuts	
8.2	2.2 INI file	58
9 RC	DUNDTABLE EVENT HANDLER EXTENSIONS - RTB_EVENTS.P	59
10 AF	PPENDIX A - UPGRADING ROUNDTABLE 9.1D SCHEMA TO 10.0A	60
11 TE	CHNICAL SUPPORT	67
11.1	DYNAMICS SUPPORT	67
11.2	ROUNDTABLE DYNAMICS SUPPORT	

1 Overview

This document describes the process of migrating from Dynamics 2.1B01 to 10.1A in a Roundtable environment.

The general migration process loads a new receipt workspace, 092dyn-dep, which is based on OpenEdge 10.1A.

After this, there are two approaches that can be taken. One maintains 2.xx and 10.xx versions of a Dynamics application in the same Roundtable repository. The other systematically migrates all of the workspaces to 10.1A.

1.1 Maintaining 2.xx and 10.xx workspaces

A new 092dyn-dep receipt workspace is loaded. This contains Progress Dynamics from OpenEdge 10.1x.

One or more new 10.1A workspaces are added with Dynamics sourced from 092dyn-dep and with the application sourced from a 2.1B01 workspace

1.2 Migrating all workspaces

The new 092dyn-dep receipt workspace is loaded

Workspaces that are sourced from 090dyn-dep have it replaced by 092dyn-dep as the source workspace

Follow-on workspaces are in turn migrated by importing the changes from their source workspace.

2 Assumptions

- A mixture of Dynamics 2.xx and Dynamics 10.xx workspaces can co-exist in the same Roundtable repository.
- The only migration path to be attempted with the instructions in this document is from 2.1B01 to 10.1A. Workspaces are upgraded to 2.1B01 before being migrated to 10.1A
- The Roundtable repository database can only be converted from Progress 9 to OpenEdge 10 after **all** of the workspaces have been migrated to OpenEdge 10.1Axx
- Users have to be responsible for only selecting workspaces that are compatible with the session that they are running.
- In a Progress 9.1E session, only Dynamics 2.1Bxx workspaces should be selected.
- In an OpenEdge 10.1A session, only Dynamics 10.1x workspaces should be selected.
- At this time, migration from Dynamics 2.1B and a Service Pack higher than 2.1B01 to 10.1A is not supported.
- Migration from Progress Dynamics 2.1B01 to OpenEdge 10.1A SP is not supported.
 The correct migration path will be to migrate to OpenEdge 10.1A and then upgrade to OpenEdge 10.1A SP (e.g. 10.1A01).

Note:

There is no functionality built into Roundtable to only allow the selection of workspaces that are dependent on a certain Progress and Dynamics version.

3 Prerequisites

3.1 Products

The following products are needed in order to complete the migration process successfully.

3.1.1 Progress 9.1E

Progress 9.1E02 must be installed.

Note:

Progress Dynamics 2.1B01 has only been verified with Progress 9.1E02. Using any other Service Pack level of Progress (e.g. 9.1E01 or 9.1E03) with Dynamics 2.1B01 is not recommended.

3.1.2 Dynamics 2.1B01

The commercial Progress Dynamics 2.1B01 package must be installed in addition to the Roundtable workspaces containing the Dynamics-based applications.

3.1.3 OpenEdge 10.1A

OpenEdge 10.1A without any service packs must be installed.

3.1.4 Roundtable TSMS 9.1D

Roundtable 9.1D with a **least patch 9.1D05** must be installed together with the latest Roundtable Dynamics Add-on package. Both of these can be downloaded from the Roundtable Technical Support web site (http://www.roundtable-tsms.com/support).

Roundtable 9.1D must be installed and compiled with Progress 9.1E.

3.1.5 Roundtable TSMS 10.0A

Roundtable 10.0A with at least patch 10.0A04 should also be installed.

This installation should also have the latest Roundtable Dynamics Add-on package for OpenEdge. The latest patch and add-on package with instructions for installation can be downloaded from the Roundtable support website.

Roundtable 10.0A must be compiled with OpenEdge 10.1A.

Note about adecomm/appsrvtt.i:

Extra steps are required during the Roundtable installation to ensure that the correct adecomm/appsrvtt.i file is being used when using OpenEdge 10.1A. This is documented in the Roundtable 10.0A Install Notes (http://www.roundtable-tsms.com/pdf/wininst100a.pdf).

Note about Roundtable 10.0A client using version 9 repository:

In order for the Roundtable 10.0A client to compile successfully against the Roundtable and Progress version repository, it is necessary to upgrade the schema of the Roundtable repository. Details for doing this can be found in Appendix A.

3.1.6 Roundtable TSMS 10.1A

Roundtable 10.1A can also be used instead of Roundtable 10.0A04 or higher.

This installation should also have the latest Roundtable Dynamics Add-on package for OpenEdge. The latest patch and add-on package with instructions for installation can be downloaded from the Roundtable support website.

Roundtable 10.1A must be compiled with OpenEdge 10.1A.

3.2 Session shortcuts and configuration files

Two sets of shortcuts and configuration files for accessing the Roundtable environment are needed.

The first set should already be in place for the existing Progress Dynamics 2.1B01 environments.

The second set of shortcuts and configuration files are needed during the migration and will be used once the migration processes have been completed.

3.2.1 Roundtable 9.1D, Progress 9.1E and Dynamics 2.1B01

The shortcuts and configuration files using Progress 9.1E, Progress Dynamics 2.1B01 and Roundtable 9.1D should already be in place.

These should include:

- .ini, .pf and icfconfig.xml files
- A shortcut to start the main Roundtable environment
- Shortcuts for Progress Dynamics development and runtime sessions outside of Roundtable – using the environments contained within Roundtable workspaces.

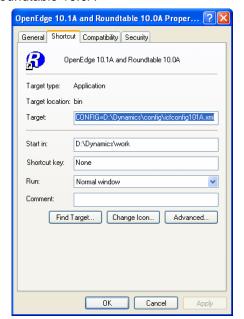
3.2.2 Roundtable 10.x and OpenEdge 10.1A

A new set of shortcuts and configuration files have to be setup up for the new OpenEdge environment. The same configuration files and shortcuts as the ones that exist already for Dynamics 2.1B01 are needed for the OpenEdge configurations.

Make sure that the shortcuts have been configured so that a Roundtable 10.0A session can be started against the existing Roundtable repository. OpenEdge 10.1A sessions must connect to the Roundtable repository database in client/server mode with the database running under a Progress version 9 database broker.

3.2.2.1 Example shortcuts

OpenEdge 10.1A and Roundtable 10.0A



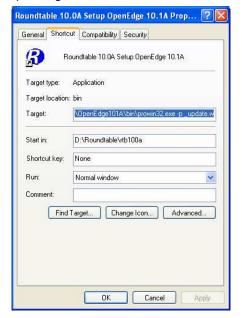
Command line:

```
D:\OpenEdge101A\bin\prowin32.exe
-p _rtb.r
-pf D:\Dynamics\pf\loc_rtb_dynamics101A.pf
-ininame D:\Dynamics\ini\loc101A_rtb100a_dyn101A.ini
-icfparam ICFCONFIG=D:\Dynamics\config\icfconfig101A.xml
```

Note: Each argument of the command line has been written on a separate line for readability. Start in:

D:\Dynamics\work

Roundtable 10.0A Setup OpenEdge 10.1A



Command line:

D:\OpenEdge101A\bin\prowin32.exe -p _update.w

Start in:

D:\Roundtable\rtb100a

3.3 PROPATHS

The basic PROPATHs for the Roundtable sessions are stored in the .ini files referenced in the startup command line for the Roundtable shortcuts. This base PROPATH will be modified when each workspace is selected during the Roundtable session.

3.3.1 Roundtable 9.1D, Progress 9.1E and Progress Dynamics 2.1B01

The PROPATH for a typical Roundtable 9.1D, Progress 9.1E and Progress Dynamics 2.1B01 environment is shown below:

```
PROPATH=
D:\Roundtable\rtb91d,
D:\Dynamics21B\gui\adecomm.pl,
D:\Dynamics21B\gui\adeicon.pl,
D:\Dynamics21B\gui\adeshar.pl,
D:\Dynamics21B\gui\adeuib.pl,
D:\Dynamics21B\gui\protools.pl,
D:\Dynamics21B\qui\adeedit.pl,
D:\Dynamics21B\gui\adedict.pl,
D:\Dynamics21B\gui\prodict.pl,
D:\Dynamics21B\gui\adecomp.pl,
D:\Dynamics21B\gui\adedesk.pl,
D:\Dynamics21B\gui\adexml.pl,
D:\Dynamics21B\gui\adeweb.pl,
D:\Dynamics21B\gui\aderes.pl,
D:\Dynamics21B\gui\adetran.pl,
D:\Dynamics21B\gui\as4dict.pl,
D:\Dynamics21B,
D:\Dynamics21B\gui,
D:\Dynamics21B\src,
D:\Dynamics21B\src\wrappers,
D:\dlc91e\gui,
D:\dlc91e\src,
D:\dlc91e\bin,
D:\dlc91e\PROBUILD\EUCAPP\EUC.PL,
D:\dlc91e\PROBUILD\EUCAPP
```

Note: Each line in the PROPATH has been written on a separate line for readability.

3.3.2 Roundtable 10.0A and OpenEdge 10.1A

The PROPATH for a typical Roundtable 10.0A and OpenEdge 10.1A session is shown below:

```
PROPATH=
D:\Roundtable\rtb100a,
D:\OpenEdge101A\gui\adecomm.pl,
D:\OpenEdge101A\gui\adeicon.pl,
D:\OpenEdge101A\gui\adeshar.pl,
D:\OpenEdge101A\gui\adeuib.pl,
D:\OpenEdge101A\gui\protools.pl,
D:\OpenEdge101A\qui\adeedit.pl,
D:\OpenEdge101A\gui\adedict.pl,
D:\OpenEdge101A\gui\prodict.pl,
D:\OpenEdge101A\gui\adecomp.pl,
D:\OpenEdge101A\gui\adedesk.pl,
D:\OpenEdge101A\gui\adexml.pl,
D:\OpenEdge101A\gui\adeweb.pl,
D:\OpenEdge101A\gui\aderes.pl,
D:\OpenEdge101A\gui\adetran.pl,
D:\OpenEdge101A\gui\as4dict.pl,
D:\OpenEdge101A,
D:\OpenEdge101A\gui,
D:\OpenEdge101A\src,
D:\OpenEdge101A\bin,
D:\OpenEdge101A\PROBUILD\EUCAPP\EUC.PL,
D:\OpenEdge101A\PROBUILD\EUCAPP
```

Note: Each line in the PROPATH has been written on a separate line for readability.

3.4 Dynamics icfconfig.xml file

A copy of an OpenEdge 10.1A icfconfig.xml file with the necessary Dynamics Session Types has to be created.

1. Take a copy of the standard <OpenEdge Install directory>\src\dynamics\icfconfig.xml file and place this together with the existing icfconfig.xml files being used for the Roundtable environment

The screen shot below shows an example of a file located in a **D:\Dynamics\config** directory called **icfconfig101A.xml**.

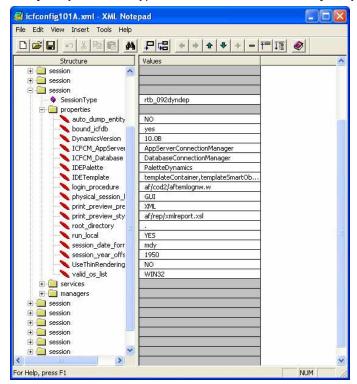


2. Make sure that this file has a correctly configured session type for the session rtb_092dyndep. This session type is needed for the 092dyn-dep receipt workspace which will be created in the next section.

NOTE:

There are no 092 session types defined in the icfconfig.xml file from the OpenEdge 10.01A installation. It is therefore necessary to manually create a session type:

3. Modify the rtb_090dyndep Session Type and rename it to rtb_092dyndep.



- a. Change all references to 090 in the properties and services to 092
- b. Change the DynamicsVersion to 10.1A

4 New 092dyn-dep Receipt Workspace

The Roundtable Partner Site Deployment packages provided for OpenEdge 10.1A consist of 1 package:

A full partner site deployment package for creating a new partner site receipt workspace for OpenEdge 10.1A and Roundtable. This deployment is provided as a .zip file with the name: rtb_101000.zip

NOTE:

The .zip file with the partner site deployment only contains the contents of the deployment's rtb_* directories. They do not contain the Dynamics source code files that were generated from the deployment. This is intentional to reduce the download size of the .zip file. The contents of the partner receipt workspace can be extracted from the updated RTB repository using the Populate Workspace functionality in Roundtable.

4.1 Create and load new Roundtable Partner Site

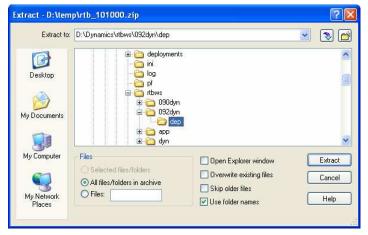
Before the contents of the deployment package can be loaded into Roundtable, a new partner site receipt workspace must be created.

This section describes the steps required to create a new 092dyn-dep receipt workspace.

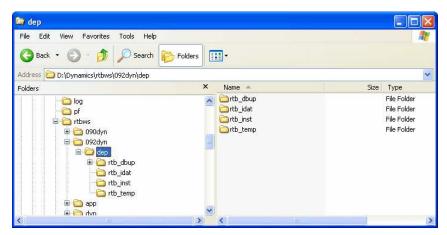
4.1.1 Unpack the Partner Site Deployment package

Create a new directory structure to contain the receipt workspace and unzip the latest full Partner Site deployment package for OpenEdge 10.xx.

1. Unzip and load the Dynamics 10.1A Roundtable package – rtb_101000.zip





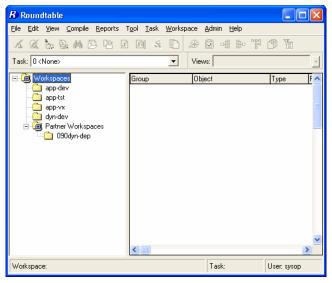


4.1.2 Create new receipt workspace

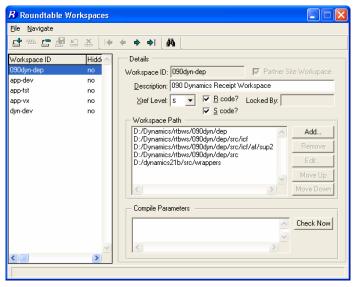
1. Start a Roundtable 10.0A and OpenEdge 10.1A session against the Roundtable repository and login as **sysop**.

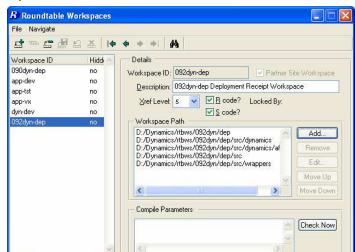


2. Do not select a workspace at this time.



3. Start Workspace Maintenance





4. Add a new workspace like the one shown in the screen shot below

It is important that the name of the workspace is **exactly** *092dyn-dep* and that the **Partner Site Workspace** toggle is **on**.

The workspace path should look like this:

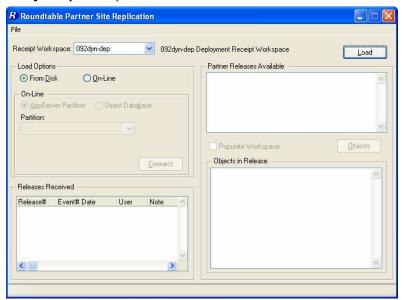
Enter data or press ESC to end.

```
<workspace-root-path>/092dyn/dep
<workspace-root-path>/092dyn/dep/src/dynamics
<workspace-root-path>/092dyn/dep/src/dynamics/af/sup2
<workspace-root-path>/092dyn/dep/src
<workspace-root-path>/092dyn/dep/src/wrappers
```

4.1.3 Load Partner Site Deployment

- 1. If the Roundtable repository site number is 000, select **Help → About** and temporarily change the site number to 101
 - (This is necessary to ensure that new Code Subtypes are loaded correctly into the repository).
- 2. Close the workspace maintenance and select **Tool** → **Partner Site Replication**.

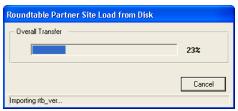
3. Select the 092dyn-dep workspace.



- 4. Select From Disk and Press Load
- 5. Answer **yes** to the following prompt.

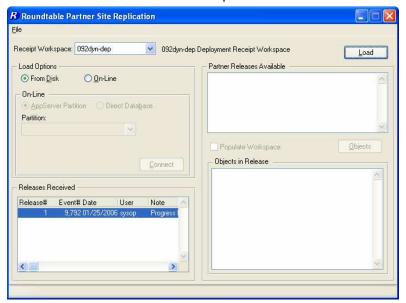


This will start the partner site load.



This load will take several minutes.

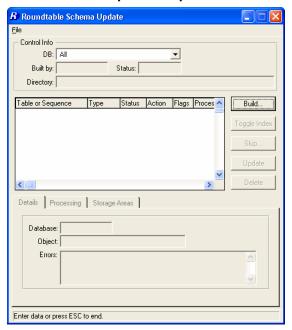
6. When the load has completed successfully, the release for the loaded Partner Site Deployment will be visible in the Partner Site Replication screen.



If the Roundtable repository site was changed at the start of this section, set it back. Select Help → About and change the site number to 000.

4.1.4 Workspace Update Schema

Select the workspace and select Workspace → Update Schema.



2. Press Build.



3. Press **OK** at the warning prompt.



4. Press **Skip**, and select the **Skip All** option. Press **OK**.



5. Answer **yes** to the following question:



6. Press **Update** and answer **yes** to the prompt.



7. Press **Delete** and answer **yes** to the next two prompts.

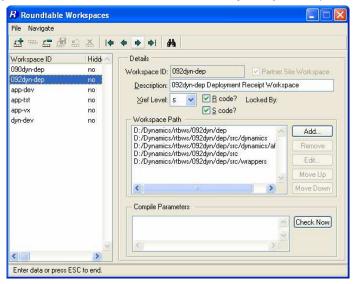




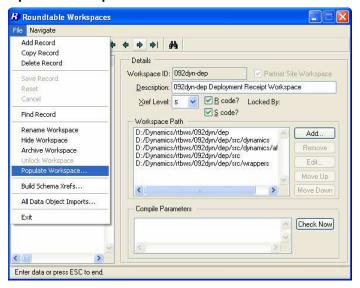
4.1.5 Populate Workspace

As the source code for the Partner Site workspace is not included in the deployment package, it is not necessary to extract the physical contents of the workspace from the Roundtable repository to disk.

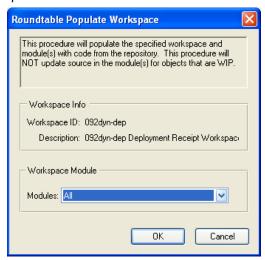
1. Restart Workspace Maintenance and select the 092dyn-dep workspace.



2. Select File → Populate Workspace



3. Select All modules and press OK.



4. Select Yes when prompted



The workspace have been populated



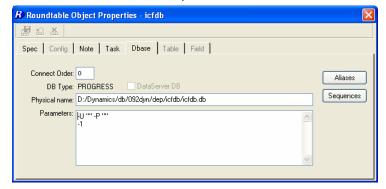
5. Press OK

Once the workspace has been populated, databases have to be created and configured for the new workspace. These databases then need to be connected within the workspace so that the workspace contents can be compiled against these databases.

4.1.6 Create and connect databases

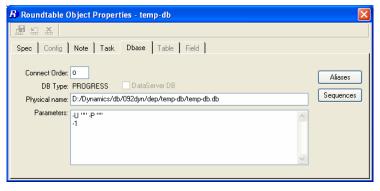
4.1.6.1 ICFDB

- 1. Run the OpenEdge 10.1A version of the **DCU** to create a new **ICFDB** database in the 092dyn-dep workspace.
- 2. Set the database connections in the workspace



4.1.6.2 Temp-db

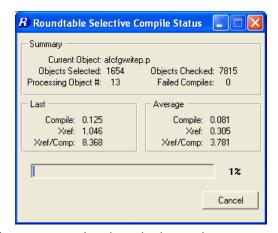
- 1. Use **Data Administration** to create a new **temp-db** database from src/adettdb/temp-db.df.
- 2. Create a new empty temp-db database
- 3. Load the following database definitions and data:
- 4. Load <workspace-root-path>/src/adettdb/temp-db.df
- 5. Load <workspace-root-path>/src/adettdb/temp-db-ctrl.df
- 6. Load <workspace-root-path>/src/dynamics/db/icf/dump/tempdbct.d into the temp-db-ctrl table
- 7. Set the database connections in the workspace.



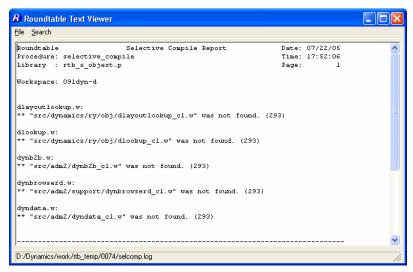
4.1.7 Compile the workspace

- 1. Re-select the **092dyn-dep** workspace
- 2. Login to Dynamics as user admin
- 3. Start Selective Compile and compile all of the objects in the workspace.





The errors shown below are normal and can be ignored.



Once the workspace has successfully compiled, the creation and setup of the **092dyn-dep** receipt partner workspace is complete.

The Dynamics framework and tools should all be runable from this workspace.

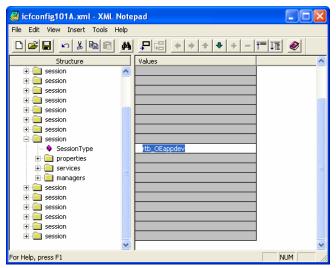
5 Adding a new 10.1A workspace

If you want to maintain 2.xx and 10.xx workspaces together

Note: Use an OpenEdge 10.1A session for Roundtable throughout this section

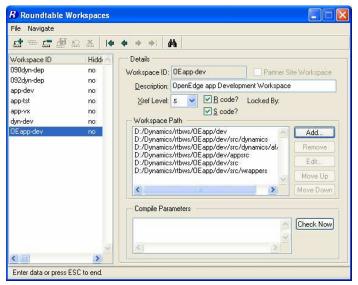
5.1 Configuration setup

 Add a session type for the new workspace into the icfconfig.xml file for this environment. It can be based on the rtb_091dyndev session type in the standard icfconfig.xml file for OpenEdge 10.1A.



5.2 Create a new OpenEdge development workspace

1. Create the new workspace, e.g. OEapp-dev.



2. Note the directory name change from icf to dynamics when defining the workspace path:

5.3 Set Workspace Sources and Import

5.3.1 Dynamics Framework Workspace Sources

1. Select the new workspace, and then select Workspace → Workspace Sources.



2. In **Workspace Sources**, add workspaces sources from the **092dyn-dep source workspace** for all of the **092-prefixed** products. The table below summarizes the products to add.

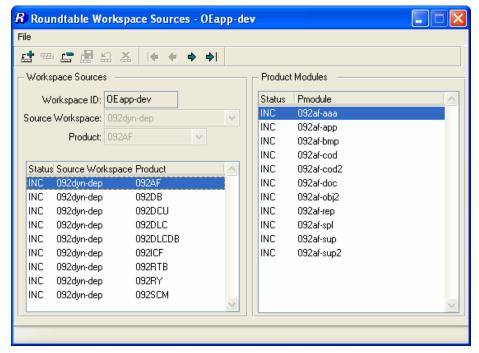
Source Workspace ID	Source Product
	092AF
	092DB
	092DCU
092dyn-dep	092DLC
	092DLCDB
	092ICF
	092RY
	*092RTB
	*092SCM

Make sure that the 092-prefixed products and not the 090 products are used as workspace sources.

^{*} The **scm** directories are only needed if the Roundtable Dynamics integration has been customized. If not, the standard integration code from the <Roundtable Installation Dir>/scm directory will work for all workspaces for this version of Roundtable.

* The RTB and SCM products are only needed if the Roundtable Dynamics integration code is to be customized. If not, then the objects contained in these products and modules are not needed for a standard configuration.

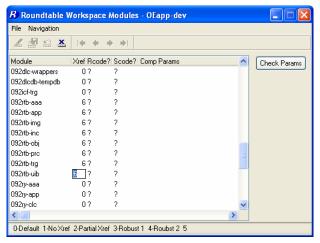
The end result should look like the screen shot below.

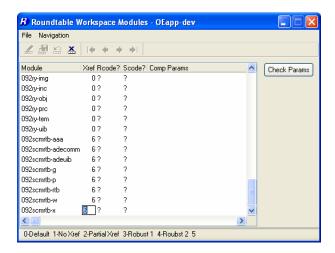


Note:

All of the sources have to be added individually to the workspace sources. They are no longer all added when the first product from a source workspace is selected.

3. If the RTB and SCM products are added to the workspace sources, the Xref level must be manual override to level 6. This is done in the **Workspace → Workspace Modules**.

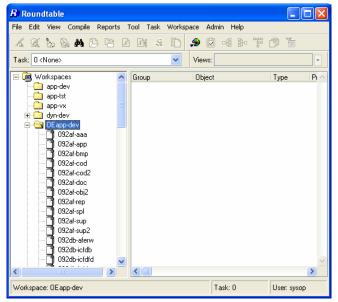




Note:

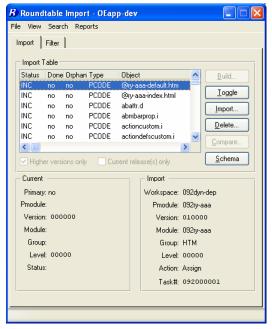
Make sure all the 092rtb-* and 092scmrtb-* are set to level 6.

4. Close the **workspace Modules** window and reselect the workspace.



5. Select Workspace → Workspace Import

6. Press **Build** and use the default settings to build a new import control table with all of the OpenEdge Dynamics objects from the **092dyn-dep** workspace.



- 7. Press **Import** and import the contents of the import table into the workspace.
- 8. Once the import is complete, delete the **Import Control** table and close the import window.

The basic Dynamics framework for OpenEdge has now been imported into the workspace.

The next steps are to import the application (which is currently in version 2.1B01 of Dynamics) into the workspace, setup databases and migrate a copy of the 2.1B01 Dynamics repository (ICFDB) to OpenEdge 10.1A.

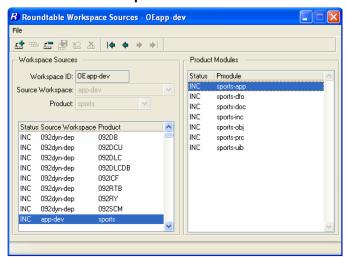
5.3.2 Application and framework customization Workspace Sources

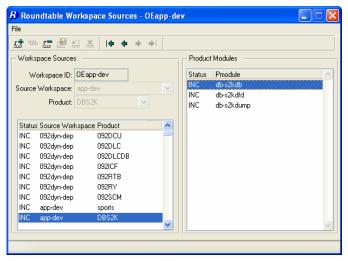
This section describes the steps required to import the existing application objects into the workspace in preparation for migrating them to OpenEdge.

- In the OpenEdge development workspace, select Workspace → Workspace Sources window.
- 2. Add the appropriate 2.1B01 application workspace (e.g. *app-dev*) as a new source to this workspace. (Ensure that a release has been created in the source workspace.)

For example:

Source Workspace ID : app-dev
Source Product ID : sports





This will add the product **sports** and the product modules from this product as **INC**luded to the OEapp-dev workspace.

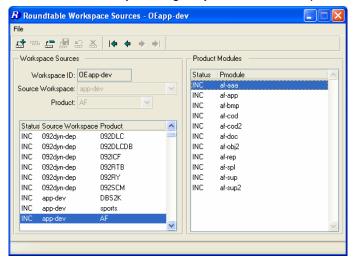
Add all of the other needed products from the same workspace as sources to this workspace. *This must be done manually for each product.*

Note:

Do not set any of the 090-prefixed products as sources to this workspace. These products are specific to Dynamics 2.xx and should therefore never be included in this workspace.

The exception to this is products which contain custom variants of Dynamics or ADM2 framework objects. These will have to be temporarily **INC**luded as workspaces sources so that the custom variants can be imported into the workspace and updated to OpenEdge.

For example, the screen shot below shows the product **AF**, which is a custom variant product for maintaining customizations to objects originally from the **090AF** product.

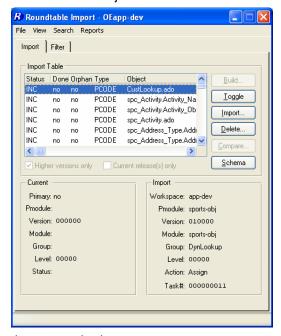


5.3.3 Importing application and framework customizations

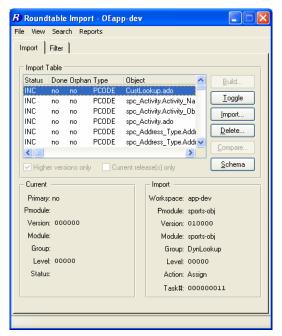
The next step is to import the Dynamics 2.1B01 application objects and any customized framework objects into the workspace.

- 1. Select Workspace → Workspace Import
- 2. Press **Build** to build a new import control table.
- 3. Review the contents of the import control table and mark any **EXC**luded objects that should be imported to **INC**.

Note: Custom variants of framework objects will be marked as EXCluded by default.



Toggle them for **INC**lusion as required.



- Once the objects in the import table that should be imported have been set to INC, press the import button to import the objects into the workspace.
- 5. Remember to print an import analysis report and delete the import control table to release the lock on the workspace.

5.4 Updating Custom Variants – Part 1

Follow these steps if any custom variants of Dynamics framework objects have been imported into the workspace.

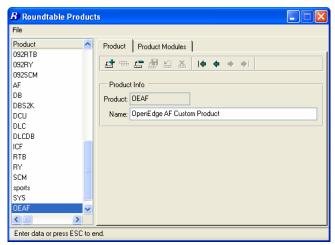
New OpenEdge custom variant products (that are based on the new 092-prefixed product modules) and product modules need to be created, and the custom variant objects need to be assigned to these new Roundtable product modules.

5.4.1 New OpenEdge custom Products and Modules

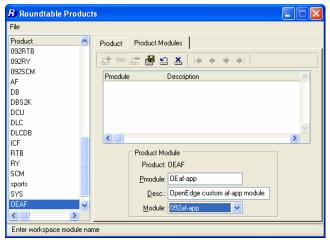
- 1. Create new Roundtable Product(s) and Product Modules for the OpenEdge versions of the custom variants.
- 2. When creating the Product Modules, ensure that the appropriate 092 Product Module (not 090) is selected for the Workspace Module Definition.

For example:

Product: OEAF

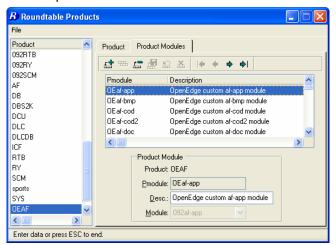


Product Module: **OEaf-app**Workspace Module Definition: **092af-app**

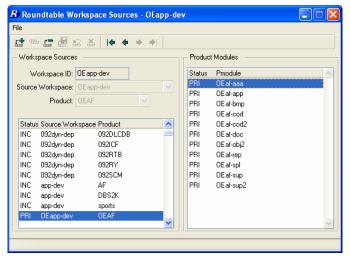


Note: Re-using the 092af-app workspace module in the example above reduces the number of workspace modules shown in the RTB tabletop.

Note: It is a good idea to create a full set of custom variant product modules when a new custom variant product is created. This reduces the administrative overhead of adding new product modules to workspaces later.



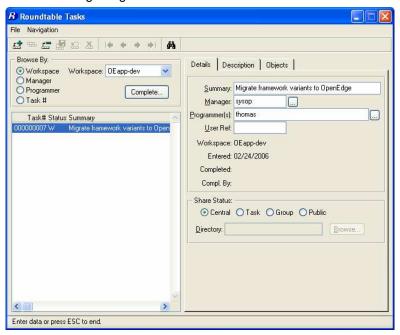
3. Add the new Product(s) as primary source products in Workspace Sources.



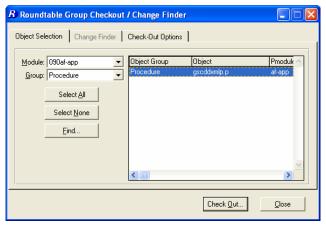
5.4.2 Creating new object variants

The custom variant products now have to be moved to the new product modules so that they can be updated in this workspace. Follow the steps below to do this.

1. Create a new task for migrating the custom variants.

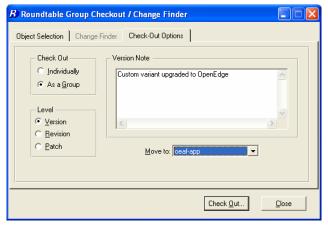


- 2. Return to the tabletop and select the new task.
- 3. Select a product module from the Roundtable Tabletop and go to **Tool → Group Checkout...**
- 4. Select the first 090 Module that contains custom variants (e.g. 090af-app)



5. Select the custom variant objects that you wish to migrate.

- 6. On the **Check Out Options** page, select the following options:
- 7. Check Out: Check Out As Group
- 8. **Level**: Version (this setting will not make any difference as new variants are always created as version 01.00.00)
- 9. **Version note**: Add common version notes for the new variant objects.
- 10. **Move to**: The new product module the object(s) are to be moved to (e.g. oeaf-app).



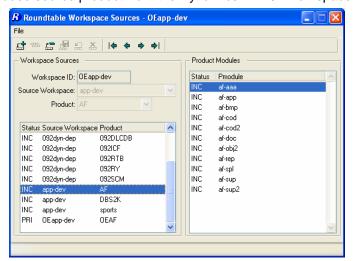
- 11. Press the Check Out button to check out and move the objects
- 12. Repeat these steps for custom variants in any other product modules.
- 13. Close the Group Checkout window and return to the Tabletop and make sure the task is selected.

The new custom variant objects will need to be updated with code changes between Dynamics 2.1B01 and OpenEdge 10.1A. This cannot be done until the workspace database have been created and set up, and the workspace contents have been compiled.

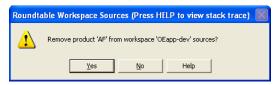
5.4.3 Delete 090 variant workspace sources

Depending on how the custom variant products for Dynamics 2.1B01 have been defined, there may be workspace sources in the new workspace which use 090-prefixed workspace modules. As these are no longer needed (all the custom variant objects from these module have been moved to new modules), they can now be deleted.

- Select Workspace → Workspace Sources
- 2. Select the **INC**luded source product from the Dynamics 2.1B01 workspace (e.g. AF).



3. **Delete** the workspace source.



- 4. Select the **Workspaces node** on the Roundtable Tabletop treeview and re-select the new workspace to refresh to module treeview.
- 5. The scr/icf directory and subdirectories will be left behind in the workspace. They will all be empty and can be deleted this has to be done manually

5.5 Create New Workspace Databases

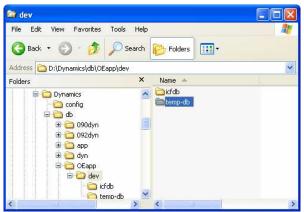
The next steps involve the creation of new workspace databases.

The ICFDB database should be a copy of the ICFDB repository from the Dynamics 2.1B01 workspace, which will be migrated to OpenEdge using the Dynamics Configuration Utility before it is used in the workspace.

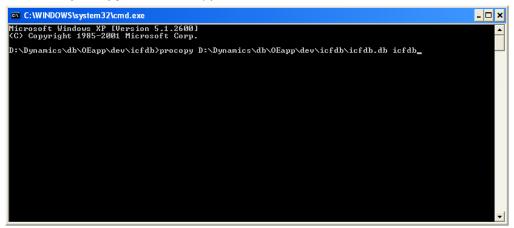
5.5.1 ICFDB database

Copy the ICFDB and application databases from the application source workspace and convert them to OpenEdge 10.

1. In the examples used in this document, the new databases are created in the same directory structure as the other databases. For the **oeapp-dev** workspace, the databases are created in *D:\dynamics\db\oeapp\dev*.



You can use procopy in 9.1E to copy the databases



2. Convert the version 9 database to an OpenEdge database using **proutil** with the **conv910** option. This command should be run from a Progress 10.1A environment after the database has been truncated from a Progress 9 session.

5.5.2 Temp-db database

Use Data Administration to create a new temp-db database from src/adettdb/temp-db.df.

- 1. Start with an empty database
- 2. Load the following data definition files into the newly created temp-db database:
 - <workspace-root-path>/src/adettdb/temp-db.df
 - <workspace-root-path>/src/adettdb/temp-db-ctrl.df
- 3. Load the following data file into the temp-db-ctrl table <workspace-root-path>/src/dynamics/db/icf/dump/tempdbct.d.

5.5.3 Application databases

Repeat the steps described for the ICFDB database for all the application databases (e.g. sports2002).

5.5.4 Database Servers

Set up OpenEdge 10 servers for the databases.

5.6 DCU Upgrade - Phase 1

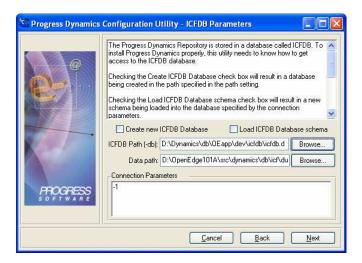
A specially modified version of the DCU shortcut must be used to correctly migrate the ICFDB from 2.1B01 to 10.1A.

- 1. Start with a copy of the OpenEdge 10.1A DCU shortcut
- 2. Open the shortcut properties and edit the Target command
- 3. Change the –icfparam parameter to read:

-icfparam DCUSETUPTYPE=Migrate21Setup



 Run the DCU from this special shortcut and upgrade the newly copied and converted ICFDB database for the new workspace.

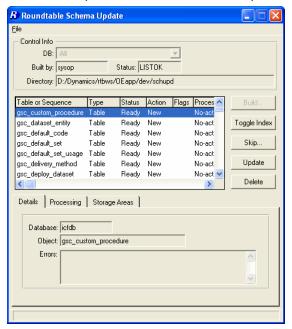


The DCU will load the following patches: ICFDB101001

5. Once the ICFDB database has been migrated **set the database connection parameters in Roundtable** for each of the PDBASE objects.

5.7 Roundtable Update Schema

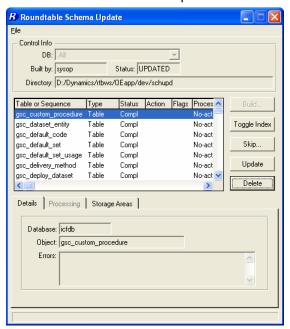
- 1. Re-select the workspace
- 2. Do not login to Dynamics. Select Cancel in the Dynamics login window
- 3. Run **Update Schema** in the workspace for the ICFDB and temp-db databases.



4. Be sure to select **Skip → Skip All Objects in list**.



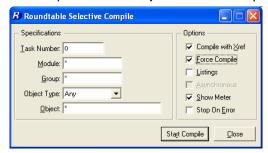
5. Remember to delete the contents of the Schema Update table.



5.8 Selective Compile

Now that the databases are connected and updated to OpenEdge, it is necessary to compile the contents of the workspace before continuing the second stage of the DCU upgrade.

1. Use Selective Compile to compile all of the objects in the workspace.



5.9 DCU Upgrade - Phase 2

5.9.1 Performing DCU Phase 2

Follow these steps to finish the DCU phase 2 upgrading.

- 1. Reselect the workspace
- 2. Login to Dynamics as the admin user



3. Phase 2 of the DCU will load 3,474 ADOs into the ICFDB
If any objects failed to compile earlier, run another selective compile now.

5.10 Custom Variants - Part 2

5.10.1 SCM Xref

- 1. Every Dynamics product module that contains custom variants needs to be cross-referenced with the relevant new Roundtable product module that you have created.
- 2. Run the Product Module Xref tool from the Development/SCM menu
- 3. Select each Dynamics product module that contains custom variants
- 4. Modify the mapping to point to the relevant new OpenEdge custom variant module.

For example:

Dynamics Product Module: af-cod2
Old SCM Product Module: af-cod2
New SCM Product Module: OEaf-cod2

5.10.2 Review Custom Variants

It is important to review the code in all custom variants that have been migrated and ensure that the customizations are in sync with this version of Dynamics. Test any code changes that are made to confirm that the objects function as expected.

Note that the source link from the 2.1B01 workspace was severed by the product module reassignment, and any further modifications of the custom variants must be made directly in this workspace.

- 1. For each of the new custom variants, compare them with the original objects from 092-prefixed product module and update the object code to include any changes that have been made to the objects between Dynamics 2.1B01 and OpenEdge 10.1A.
 - **TIP:** This can be done using a comparison tool and comparing the new custom variant object with the corresponding object in the 092dyn-dep workspace.
- Make sure the code changes are compiled and tested to make sure the customizations do not break anything. It may not be possible to complete the testing until the databases have been connected and the contents of the workspace have been compiled.

5.10.3 Check in Custom Variants

- 1. Go to Task Maintenance in Roundtable
- 2. Highlight the task that was created for migrating custom variants
- 3. Select the Complete Task option

4. When prompted whether to export object information from the Dynamics repository, select Export All

5.11 Register migrated application object and data changes

Once the basic migration of the framework and the custom variant objects is completed, the objects and data which have changed during the migration have to be registered in Roundtable.

The DCU migration process does not check out objects which are changed during the migration process. There will therefore very likely be objects with changed ICFDB repository data, which subsequently have to be version controlled in Roundtable.

The fastest way to do this is to use the XML Export utility from the Roundtable Dynamics integration. This utility can be used to dump the contents of the object .ado files and check out the objects at the same time. It does not, however, check if the objects have been changed. This means that all of the exported objects will be checked out in Roundtable.

Another option is to use the Progress Dynamics DataSet Export utility to dump the contents of the .ado files, and then use the Roundtable group Checkout to check out objects which have changed. This solution may limit the number of objects that are checked out. However, it is a more manual and time consuming process. Also, most of the .ado files will have timestamps in the headers, which means that they will be seen as changed by Roundtable.

The preferable solution is therefore to use the XML Export utility to dump and check out at the same time. The following steps summarize how to do this.

- 1. Create a task to register migrated objects under.
- 2. Return to the Roundtable Tabletop and select the newly created task.
- 3. Select Tool → Progress Dynamics → XML Export.
- 4. The XML Export can either be done for all objects at once or for individual product modules one at a time.

The screen shot below shows all objects in the repository selected at once.



5. Make sure the options shown in the screen shot above are selected and then select **Process Selected** Objects.

The XML Export can either be done for all objects at once or for individual product modules one at a time.

5.12 Release

Once all of the object changes and data changes in the new workspace have been completed, compilable objects have been compiled and everything has been tested, create a release in the new workspace.

 Select Workspace → Workspace Releases and create a new release in the 10.1A-based workspace.

6 Migrating workspaces to 10.1A

If you want to migrate all workspaces

This example is based on a Dynamics 2.1B01 workspace that is currently sourced from the 090dyn-dep receipt workspace. The example explains how to convert an existing set of workspaces from Dynamics 2.1B01 to OpenEdge 10.1A.

If this solution is chosen, it should be noted that the ability to maintain the managed application and deploy to application end-users using Dynamics 2.1B01 will no longer be possible. End-users will have to be migrated to OpenEdge before they can receive any application updates. This should be taken into consideration when deciding which migration strategy to use.

The method described in the first part of this document is preferable, as it provides users with the flexibility of being able to work on both Dynamics 2.1B01 and 10.1A versions of their applications until all end-users have been migrated to OpenEdge.

Important notes regarding this migration strategy:

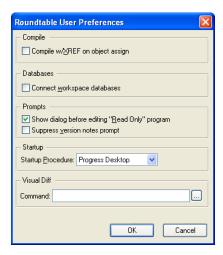
- Before starting the migration, complete all open tasks in the workspace and create a release.
- The migration steps are performed using OpenEdge 10.1A. Remember that any Progress version 9 databases in the workspace can only be connected in client/server mode in an OpenEdge 10 session. Any adjustments to the database connection parameters should be made in a 2.1B01 session prior to beginning the migration.
- Also note that schema changes can only be made with the same version of Progress as the database, i.e. only a version 9 session can update the schema of a version 9 database.
- It is advisable to make a backup of the workspace databases (especially the ICFDB) before starting the migration.
- In order to prevent the Dynamics integration hooks from attempting to fire and raising r-code version errors, the automatic connection of the ICFDB database in the workspace is temporarily suspended during the migration process.

6.1 Disable Integration Hooks

The easiest way to disable the integration between Roundtable and Dynamics is to set Roundtable to not connect to the workspace databases when a workspace is selected.

This is a user based option that has to be set for the user doing the migration – typically the sysop user.

- 1. Start a Roundtable session
- Select Admin → Preferences.
- 3. Uncheck the Connect workspace databases toggle.



4. Press OK.

This will prevent the ICFDB database from being connected when the workspace is next selected, and the Dynamics integration hooks will not fire.

5. Exit from Roundtable

6.2 Change Workspace Path

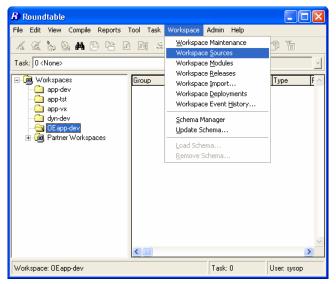
- 1. Start a Roundtable session from your 10.1A shortcut
- 2. Do not select a workspace in the tabletop
- 3. In Workspace Maintenance, select the workspace that is being migrated (e.g. app-dev).
- 4. Modify the workspace path to change all instances of src/icf to src/dynamics:

6.3 Framework Workspace Sources

6.3.1 Dynamics Framework Workspace Sources

- 1. Select the workspace to be migrated.
- Select Workspace → Workspace Sources.

^{*} The **scm** directories are only needed if the Roundtable Dynamics integration has been customized. If not, the standard integration code from the <Roundtable Installation Dir>/scm directory will work for all workspaces for this version of Roundtable.



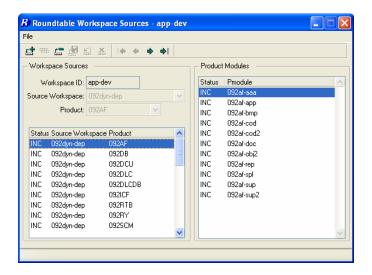
- 3. **EXC**lude all 090dyn-dep products
- 4. In Workspace Sources, add workspaces sources from the **092dyn-dep source workspace** for all of the **092-prefixed** products. The table below summarizes the products to add.

Source Workspace ID	Source Product
092dyn-dep	092AF
	092DB
	092DCU
	092DLC
	092DLCDB
	092ICF
	092RY
	*092RTB
	*092SCM

Make sure that the 092-prefixed products and not the 090 products are used as workspace sources.

* The RTB and SCM products are only needed if the Roundtable Dynamics integration code is to be customized. If not, then the objects contained in these products and modules are not needed for a standard configuration.

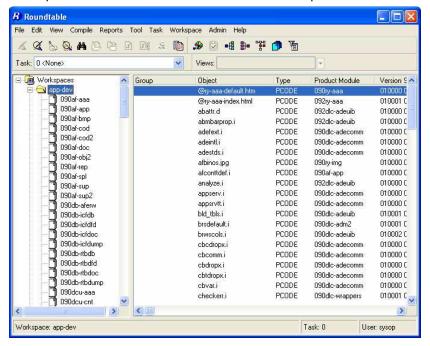
The end result should look like the screen shot below.



Note:

All of the sources have to be added individually to the workspace SOURCES. They are no longer all added when the first product from a source workspace is selected.

5. Close the workspace sources window and reselect the workspace.



6.3.2 Import from New Source

- Select Workspace → Workspace Import
- 2. Press Build to build a new import control table.

6.3.2.1 Include all objects

Most of the objects will be flagged as EXC initially. Select File → Include AII to change them to INC.

6.3.2.2 Exclude Objects with Custom Variants

 Individually select all objects in the list for which you have created custom variants, and Toggle to EXC.

6.3.3 Import

- 1. Select **Import**.
- 2. On completion, delete the import table

6.4 Updating Custom Variants – Part 1

Follow these steps if any custom variants of Dynamics framework objects have been created in this workspace.

New OpenEdge custom variant products (that are based on the new 092-prefixed product modules) and product modules need to be created, and the custom variant objects need to be assigned to these new Roundtable product modules. This I necessary because the existing custom variant products and modules are very likely linked to 090-prefixed workspace modules at the moment.

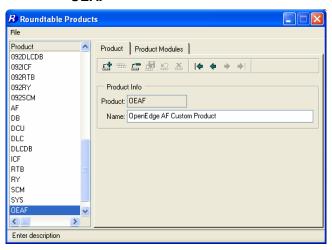
6.4.1 New OpenEdge custom Products and Modules

- 1. Create new Roundtable Product(s) and Product Modules for the OpenEdge versions of the custom variants.
- 2. When creating the Product Modules, ensure that the appropriate 092 Product Module (not 090) is selected for the Workspace Module Definition.

For example:

Product:

OEAF

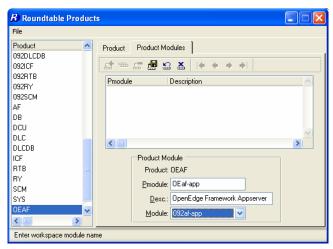


Product Module:

OEaf-app

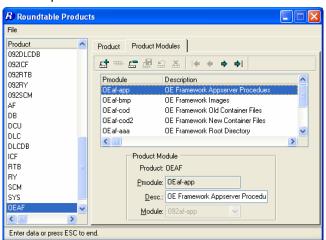
Workspace Module Definition:

092af-app

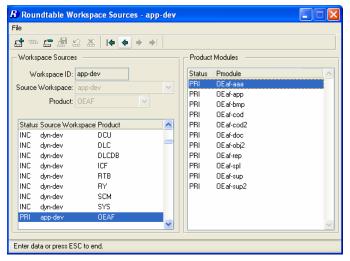


Note: Re-using the 092af-app workspace module in the example above reduces the number of workspace modules shown in the RTB tabletop.

Note: It is a good idea to create a full set of custom variant product modules when a new custom variant product is created. This reduces the administrative overhead of adding new product modules to workspaces later.



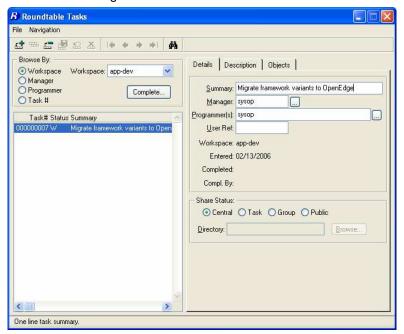
1. Add the new Product(s) as primary source products in **Workspace Sources**.



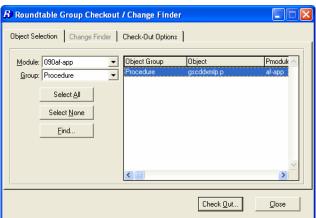
6.4.2 Creating new object variants

The custom variant products now have to be moved to the new product modules so that they can be updated in this workspace. Follow the steps below to do this.

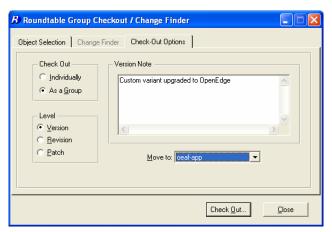
1. Create a new task for the migration of the custom variants.



- 2. Return to the tabletop and select the new task.
- 3. Select a product module from the Roundtable Tabletop and go to **Tool → Group Checkout...**
- 4. Select the first 090 Product Module that contains custom variants (e.g. 090af-app)



- 5. Select the custom variant objects that you wish to migrate.
- 6. On the **Check Out Options** page, select the following options:
 - Check Out: Check Out As Group
 - Level: Version (this setting will not make any difference as new variants are always created as version 01.00.00)
 - Version note: Add common version notes for the new variant objects.
 - Move to: The new product module the object(s) are to be moved to (e.g. OEaf-app).



- 7. Press the Check Out button to check out and move the objects
- 8. Repeat these steps for custom variants in any other product modules.
- Close the Group Checkout window and return to the Tabletop and make sure the task is selected.

The new custom variant objects will need to be updated with code changes between Dynamics 2.1B01 and OpenEdge 10.1A. This cannot be done until the workspace database have been created and set up, and the workspace contents have been compiled.

6.5 Convert Workspace Databases

6.5.1 ICFDB and Application databases

Use proutil with the conv910 option to convert the ICFDB and application databases to version 10. Before converting each database, you will need to truncate the BI file using proutil in Progress 9.1E.

Note: it is very important that you make a backup copy of each database before converting it.

6.5.2 Temp-db database

Use Data Administration to create a new temp-db database from src/adettdb/temp-db.df.

- 1. Start with an empty database
- 2. Load the following data definition files into the newly created temp-db database:
 - <workspace-root-path>/src/adettdb/temp-db.df
 - <workspace-root-path>/src/adettdb/temp-db-ctrl.df
- Load the following data file into the temp-db-ctrl table

 *workspace-root-path>/src/dynamics/db/icf/dump/tempdbct.d.

6.5.3 Application databases

Repeat the steps described for the ICFDB database for all the application databases (e.g. sports2002).

6.5.4 Database Servers

1. Set up OpenEdge 10 servers for the databases.

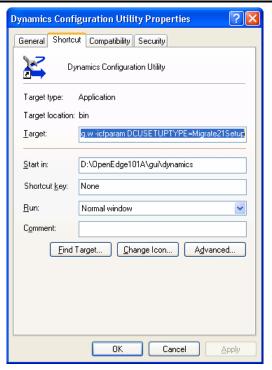
6.6 DCU Upgrade - Phase 1

A specially modified version of the DCU shortcut must be used to correctly migrate the ICFDB from 2.1B01 to 10.1A.

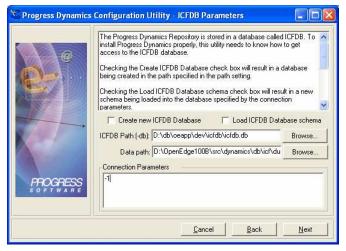
1. Start with a copy of the OpenEdge 10.1A DCU shortcut

- 2. Open the shortcut properties and edit the Target command
- 3. Change the -icfparam parameter to read:

-icfparam DCUSETUPTYPE=Migrate21Setup



4. **Run the DCU** from this special shortcut and upgrade the newly copied and converted ICFDB database for the new workspace.

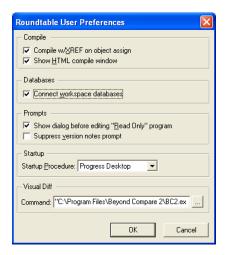


The DCU will load the following patches: ICFDB101001

5. Once the ICFDB database has been migrated **set the database connection parameters in Roundtable** for each of the **PDBASE** objects.

6.7 Re-enable Integration Hooks

- 1. Select Admin → Preferences
- 2. Check the Connect workspace databases toggle.

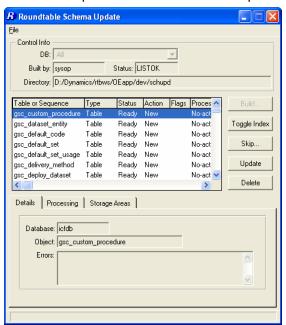


3. Press OK.

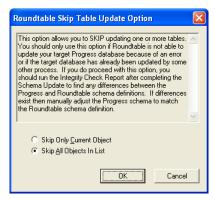
This will restore the connection to the ICFDB database, and the Dynamics integration hooks will fire when the workspace is next selected.

6.8 Roundtable Update Schema

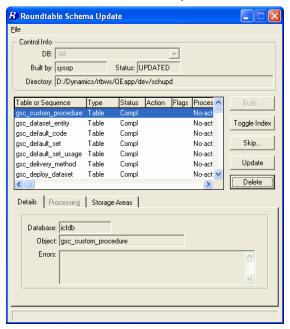
- 1. Re-select the workspace
- 2. Do not login to Dynamics. Select Cancel in the Dynamics login window
- 3. Run Update Schema in the workspace for the ICFDB and temp-db databases.



4. Be sure to select **Skip → Skip All Objects in list**.



5. Remember to delete the contents of the Schema Update table.



6.9 Selective Compile

Now that the databases are connected and updated to OpenEdge, it is necessary to compile the contents of the workspace before continuing the second stage of the DCU upgrade.

1. Use **Selective Compile** to compile all of the objects in the workspace.



6.10 DCU Upgrade - Phase 2

6.10.1 Phase 2 manual preparation

Manual preparation must be done before loading the ado into the ICFDB. The following code must be run to remove the missing ADOs from the status file in the ICFDB db. The following steps summarize how to do this.

- 1. Reselect the workspace.
- Do not log in to Dynamics. Select Cancel in the Dynamics login window.
- 3. Open the procedure editor and run the following code.

```
/* Code to remove missing ADOs files for DCU Phase 2 upgrade */
FOR EACH ryt_dbupdate_status WHERE
    ryt_dbupdate_status.file_name BEGINS "scm/rtb":U EXCLUSIVE-LOCK:
    DELETE ryt_dbupdate_status.
END.
```

6.10.2 Performing DCU Phase 2

After the manual preparation the ADOs will be loaded into the ICFDB. Follow these steps to finish the DCU phase 2 upgrading.

- 1. Reselect the workspace
- 2. Login to Dynamics as an administrative user



Phase 2 of the DCU will load 3,474 ADOs into the ICFDB
 If any objects failed to compile earlier, run another selective compile now.

6.11 Custom Variants – Part 2

6.11.1 SCM Xref

- 1. Every Dynamics product module that contains custom variants needs to be cross-referenced with the relevant new Roundtable product module that you have created.
- 2. Run the Product Module Xref tool from the Development/SCM menu
- 3. Select each Dynamics product module that contains custom variants
- 4. Modify the mapping to point to the relevant new OpenEdge custom variant module.

For example:

Dynamics Product Module: af-cod2
Old SCM Product Module: af-cod2
New SCM Product Module: OEaf-cod2

6.11.2 Review Custom Variants

It is important to review the code in all custom variants that have been migrated and ensure that the customizations are in sync with this version of Dynamics. Test any code changes that are made to confirm that the objects function as expected.

Note that the source link from the 2.1B01 workspace was severed by the product module reassignment, and any further modifications of the custom variants must be made directly in this workspace.

1. For each of the new custom variants, compare them with the original objects from 092-prefixed product module and update the object code to include any changes that have been made to the objects between Dynamics 2.1B01 and OpenEdge 10.1A.

TIP: This can be done using a comparison tool and comparing the new custom variant object with the corresponding object in the 092dyn-dep workspace.

2. Make sure the code changes are compiled and tested to make sure the customizations do not break anything. It may not be possible to complete the testing until the databases have been connected and the contents of the workspace have been compiled.

6.11.3 Check in Custom Variants

- 1. Go to Task Maintenance in Roundtable
- 2. Highlight the task that was created for migrating custom variants
- 3. Select the Complete Task option
- 4. When prompted whether to export object information from the Dynamics repository, select **Export All**

6.11.4 Clear Old Products and Modules

Remove the old 090 custom variant product(s) from this workspace.

- 1. In **Workspace Sources**, highlight each 090 custom variant product (e.g. OEAF)
- 2. Select Delete Source...

6.12 Remove old framework objects

Some 090 modules might still show in the Module list under the workspace. Only obsolete objects remain in these modules. The objects can be removed manually from the workspace:

- 1. Highlight each object
- Select File → Delete Object.

After this the 090 modules should no longer appear in the Module list in the Object in Module view

After the migration, the old *icf* directory and sub-directories will be left behind in the workspace with all of the old r-code files. The *icf* directory (including all sub-directories and files) can be removed now.

6.13 Release

1. Create a release in the migrated workspace.

7 Follow-on workspaces

These steps apply to a Dynamics 2.1B01 workspace that is sourced from an already-migrated 10.1A application workspace. Please refer to the previous section if more detail is required for any step.

7.1 Disable Integration Hooks

- 1. Start a Roundtable session from your Progress 9.1E shortcut
- Select Admin → Preferences.
- 3. Uncheck the Connect workspace databases toggle.

4. Press OK.

This will prevent the ICFDB database from being connected when the workspace is next selected, and the Dynamics integration hooks will not fire.

5. Exit from Roundtable

7.2 Change Workspace Path

- 1. Start a Roundtable session from your 10.1A shortcut
- 2. Do not select a workspace in the tabletop
- 3. In Workspace Maintenance, select the workspace that is being migrated
- 4. Modify the workspace path to change all instances of src/icf to src/dynamics

7.3 Update Workspace Sources

- 1. Select the workspace that is being migrated
- 2. Select Workspace → Workspace Sources
- 3. EXClude all 090 Products
- Ensure that all 092 Products are INCluded
- 5. Ensure that any new custom variant Products (based on 092 Products) are INCluded

7.4 Workspace Import

7.4.1 Include all objects

- Select Workspace → Workspace Import
- 2. Using the default settings, Build an Import Control Table.

Most of the objects will be flagged as **EXC** initially.

- Select File → Include All to change all object statuses to INC
- 4. **Import** all of the objects in the import control table.

Once the import process is complete, delete the contents of the import control table.

7.5 Convert Workspace Databases

7.5.1 ICFDB and Application databases

Use proutil with the conv910 option to convert the ICFDB and application databases to version 10. Before converting each database, you will need to truncate the BI file using proutil in Progress 9.1E.

Note: it is very important that you make a backup copy of each database before converting it.

7.5.2 Temp-db database

Use Data Administration to create a new temp-db database from src/adettdb/temp-db.df.

- 1. Start with an empty database
- 2. Load the following data definition files into the newly created temp-db database:
 - <workspace-root-path>/src/adettdb/temp-db.df
 - <workspace-root-path>/src/adettdb/temp-db-ctrl.df
- Load the following data file into the temp-db-ctrl table
 <workspace-root-path>/src/dynamics/db/icf/dump/tempdbct.d.

7.5.3 Application databases

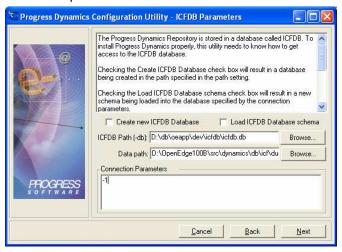
Repeat the steps described for the ICFDB database for all the application databases (e.g. sports2002).

- Database Servers
- Set up OpenEdge 10.1A servers for the databases.

7.6 DCU Upgrade - Phase 1

Use the previously created specially modified version of the DCU shortcut to migrate the ICFDB from 2.1B01 to 10.1A.

1. **Run the DCU** from this special shortcut and upgrade the newly copied and converted ICFDB database for the new workspace.

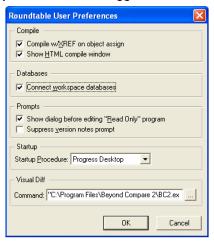


The DCU will load the following patches: ICFDB101001

2. Once the ICFDB database has been migrated **set the database connection parameters in Roundtable** for each of the PDBASE objects.

7.7 Re-enable Integration Hooks

- 1. Select Admin → Preferences
- 2. Check the Connect workspace databases toggle.

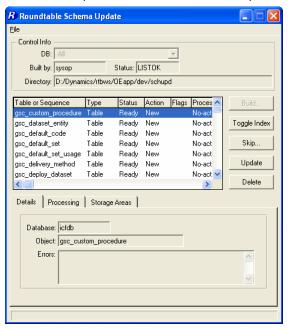


3. Press OK.

This will restore the connection to the ICFDB database, and the Dynamics integration hooks will fire when the workspace is next selected.

7.8 Roundtable Update Schema

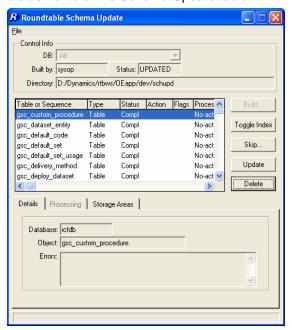
- 1. Re-select the workspace
- 2. Do not login to Dynamics. Select Cancel in the Dynamics login window
- 3. Run **Update Schema** in the workspace for the ICFDB and temp-db databases.



4. Be sure to select Skip → Skip All Objects in list.



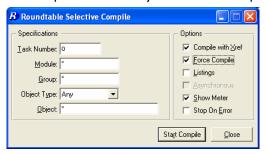
5. Remember to delete the contents of the Schema Update table.



7.9 Selective Compile

Now that the databases are connected and updated to OpenEdge, it is necessary to compile the contents of the workspace before continuing the second stage of the DCU upgrade.

1. Use **Selective Compile** to compile all of the objects in the workspace.



7.10 DCU Upgrade - Phase 2

- 1. Reselect the workspace
- 2. Login to Dynamics as an administrative user



3. Phase 2 of the DCU will load 3,474 ADOs into the ICFDB
If any objects failed to compile earlier, run another selective compile now.

7.11 Custom Variants from Source

Custom variants from the source workspace will be imported already migrated.

7.11.1 SCM Product Module Xref

- 1. Run the SCM Product Module Xref tool from the Development/SCM menu
- 2. Select each Dynamics product module that contains custom variants
- 3. Modify the mapping to point to the relevant new *OpenEdge* custom variant module.

7.11.2 Clear Old Product Modules

1. In Workspace Sources, **EXC**lude the old 090 custom variant products

7.12 Release

1. Create a release in this workspace.

8 Converting the Roundtable Repository

After all of the workspaces are migrated to OpenEdge 10, the Roundtable repository database can be converted from Progress version 9 to 10 using proutil with the conv910 option.

At this time the Roundtable repository and environment can also be upgraded to version 10.0A of Roundtable. Please note the following when performing this upgrade.

8.1 Migrating the Roundtable 9.1D Repository to 10.0A

8.1.1 Backup

Make a backup copy of the Roundtable repository

8.1.2 Roundtable Setup

The Roundtable Setup process updates the schema of the Roundtable repository and compiles the Roundtable code. The whole process must be run against the repository that is being migrated. Roundtable code that is compiled against a repository newly created in Roundtable 10.0A is not compatible with repositories that have been migrated from Roundtable 9.1D.

During the Roundtable Setup process, specify the schema.pf file that was used for the previous creation and updates of the Roundtable repository. The comments at the top of the file should read:

#schema update parameters file
#release=91D1

8.2 Roundtable/Dynamics Session Files

Before running Roundtable 10.0A against your migrated repository, ensure that the session shortcuts and configuration files are updated appropriately.

8.2.1 Shortcuts

Change the target command to run the OpenEdge 10.1A version of prowin32.exe, and the Roundtable 10.0A version of _rtb.r

8.2.2 INI file

Ensure that the PROPATH in the .ini file for your Roundtable sessions points to the correct locations for your Roundtable 10.0A and OpenEdge 10.1A installations.

9 Roundtable Event Handler extensions - rtb_events.p

If the event handler for Roundtable has been customized beyond the changes that have been done as part of the standard Roundtable and Dynamics integration, then the following steps have to be followed:

- 1. copy the customized version of rtb_events.p from src/dynamics/scm/custom to the root directory of the Roundtable TSMS installation that is compiled with OpenEdge 10.1A (e.g. C:\Roundtable_OE).
- 2. Compile rtb_events.p in the Roundtable root directory. This can be done by selecting workspace "None" and executing the following code in the Procedure Editor:

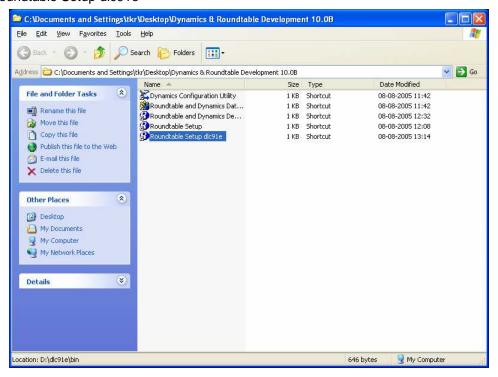
COMPILE rtb_events.p SAVE.

10 Appendix A - Upgrading Roundtable 9.1D schema to 10.0A

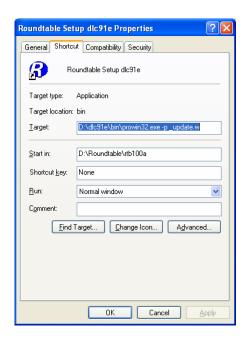
This section describes the steps necessary to upgrade a roundtable 9.1D repository database on Progress version 9 to a Roundtable 10.0A repository on Progress version 9. The required steps are different from the steps required to update a Roundtable repository database on Progress version 10.

The assumption is made that the Roundtable repository is at schema level 91D1 (schema.pf with "#release=91D1"). This repository will be upgraded to schema level 10A1.

1. Copy the existing "Roundtable Setup" shortcut for Roundtable 10.0A and rename it "Roundtable Setup dlc91e"



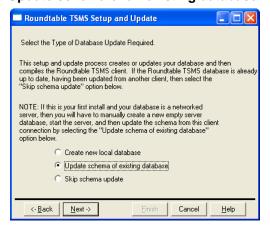
- 2. Edit the properties for the newly created shortcut.
- Replace the path to OpenEdge 10.1A prowin32.exe with the corresponding Progress 9.1E prowin32.exe.
- 4. Start in must still point to the location of the Roundtable 10.0A installation.



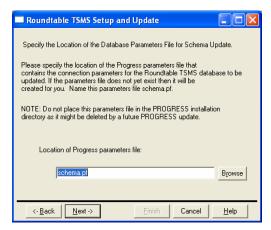
5. Double click on the "Roundtable Setup dlc91e" shortcut.



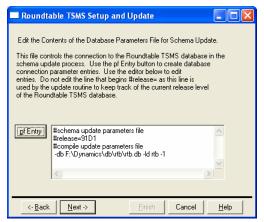
- 6. Press Next.
- 7. Select the radio button Update schema of an existing database.



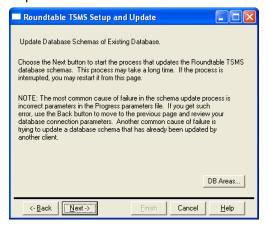
8. Press Next button.



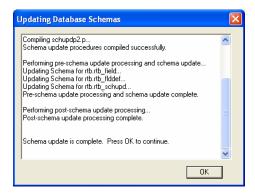
- 9. Locate the correct "schema.pf" file and press Next.
- 10. Make sure that schema level is at 91D1 and the correct Roundtable database is set in the connection parameters.



- 11. Press Next.
- 12. Press the **Next** button to update the schema.



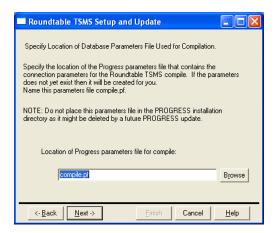
13. Press **OK** button when the schema update is completed.



14. You can now cancel the rest of the Setup wizard.

The schema has now been updated to the correct version.

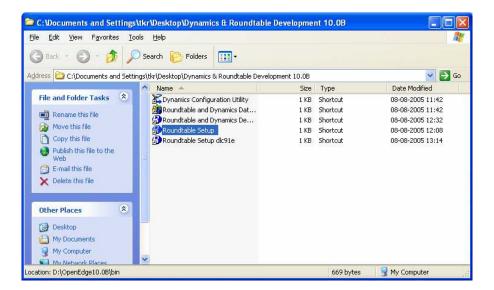
The subsequent compilation of the Roundtable 10.0A client will be done in OpenEdge 10.



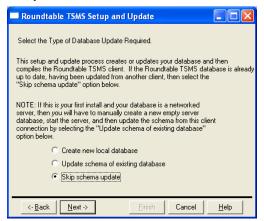
15. Press Yes to cancel the Setup and Update wizard.



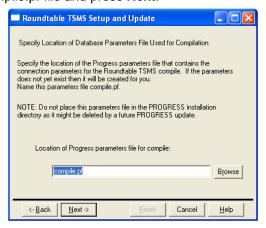
16. Double click on the "Roundtable Setup" shortcut (OpenEdge 10.1Aand Roundtable 10.0A).



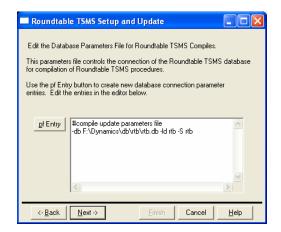
17. Choose the **Skip schema update** radio button.



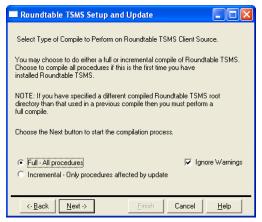
- 18. Press Next.
- 19. Locate the correct compile.pf file and press Next.



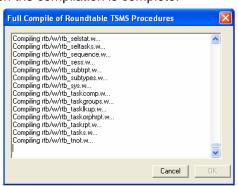
20. Make sure the correct Roundtable database is specified in the connection parameters.



- 21. Press Next.
- 22. Select the "Full All procedures" radio button.



- 23. Press **Next** to start the compilation.
- 24. Press the **OK** button when the compilation is complete.



25. Press Finish button to exit the Setup and Update wizard.



The Roundtable repository now has the correct schema level for Roundtable 10.0A and the client has been compiled with OpenEdge 10.1A.

11 Technical Support

11.1 Dynamics Support

Issues with core Dynamics functionality and upgrading Dynamics repositories or code, which do not have anything to do with the use of Roundtable and Dynamics should be directed to Progress Software Corporation's Technical Support.

http://www.progress.com/support

11.2 Roundtable Dynamics Support

The Roundtable Dynamics integration using Roundtable 10.0A02 or higher and OpenEdge 10.0B01 or higher is now supported by Roundtable Technical Support.

The following kinds of issues can be directed to Roundtable Technical Support:

- Issues related to the use of the core Roundtable product
- Issues related to the use of the Roundtable Dynamics integration
- Enhancement requests to Roundtable or the Roundtable Dynamics integration

Contact details for Roundtable Technical Support can be found at:

http://www.roundtable-tsms.com/support.