CNC Basics for Application Folks: Environments, Path Codes and Mastering Program Versions

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*Okay, truth is we thought about calling this "CNC for Dummies" but we didn't want to insult anyone. This White Paper is written by Tom Messer and Jason Batte of Terillium. We hope to demystify the heavy tech side of OneWorld® and help you, **the application expert,** understand JDE® 'under the covers'. You will find valuable technology tips that will help prevent the heartbreak of lost version specs and disappearing custom grid formats. You too can learn to say to your users, "Try checking out that object to your local machine", and actually know what you are talking about!*

CNC Basics

What does CNC Really Stand for?

CNC stands for Configurable Network Computing. In short, CNC is the foundation on which OneWorld is built. You may have heard the terms middleware, data source, path codes, object configuration manager (OCM), and environments. These are all key terms for the technical side of OneWorld. Unlike WorldSoftware™, OneWorld has the capabilities to be run on many different platforms (NT, Unix, OS400) as well as many different types of database management systems. Let's take a look at each of these terms and see if we can define CNC.

Middleware

So how does OneWorld communicate with the different protocols, operating systems, and databases? The answer is Middleware. Middleware is used to bridge the gap between the different platforms and databases. Middleware uses applications like JDENet, JDEBase, and third party software (Client Access and ODBC) to communicate from the client workstation to the servers, as well as from server to server, without worrying about operating systems or protocols. Middleware gives JDE the ability to have a consistent architecture - allowing JDE to develop new applications for OneWorld without having to worry about the different platforms and databases. **This is also known as platform independence.**

Data Sources

Data sources are the building blocks for OneWorld. Data sources define the database and logic servers that OneWorld uses to obtain data and run logic. The database data source points OneWorld to the databases so that applications can access them. There are many different types of database data sources. Some examples are business data, central objects, version, system, and data dictionary. The logic data source points OneWorld applications to the correct server used to process the logic. In OneWorld, you are able to distribute your processing (run objects on different servers), and, in order for OneWorld to know where to process, it must use the logic data source.

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For example:

Environment	Business Data	Central Objects	Version	System	Data Dictionary
Production	Business Data – Proddta	Central Objects – PRODB733	Versions – PRODB733	System – B733	Data Dictionary – B733
Test	Business Data – Testdta	Central Objects – CRPB733	Versions – CRPB733	System – B733	Data Dictionary – B733

Path Codes

A Path Code defines a specific set of objects for OneWorld to use at run time. Path codes are simply the directories (ex. b7\prodb733) that contain the replicated objects for OneWorld. When you check out an object, OneWorld checks out and stores the object into your path code or directory on your workstation. When you check an object in, OneWorld copies that object from your directory (defined by the path code) to the same path code on the deployment server.

Environment	Path Code
Production	PRODB733
Test	CRPB733
CRP	CRPB733

Object Configuration Manager

OneWorld allows you to partition logic and data objects. In order to accomplish this, OneWorld uses OCM or Object Configuration Manager. OCM allows you to dynamically configure the distributed logic and data without any programming. Simply put, when running an application, OneWorld looks to the OCM to determine where to find the data needed for the application (database data source), as well as where to run the logic (Logic Data source).

Environment	Database Data Source	Logic Data Source
Production	Business Data – Prod	LogicServerName
Test	Business Data – Test	LogicServerName