White Paper

Migrating EMC Documentum Products from D5.3 to D6.5 and Beyond

Best Practices Planning

Abstract

This white paper introduces features that have changed or are new in EMC® Documentum® 6.5. You can use this information to help you plan your upgrade or move from an existing Documentum 5.3 or 6 implementation to the new Documentum 6.5 platform. Changes in 6.5 SP1 are included.

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Executive summary

There are several things to consider when planning the migration of a custom or Documentum® Foundation Classes-based application to a newer release:

- What are the best practices and recommendations from EMC® Documentum® that can help minimize the cost of sustaining applications after they have been migrated?
- What planning should I do to avoid unnecessary customizations, both now and in the future?
- Can the cost of the migration be simplified?

This paper is intended to assist you with these questions.

Introduction

This white paper talks about upgrading DFC-based clients and migrating your customizations to the new version. The white paper then lays out the Documentum product direction. It discusses support for Documentum Web Development Kit (WDK) in the future and then details changes in version 6, 6.5, and 6.5 SP1 DFC clients to help you plan your application migration strategy.

Audience

This white paper is intended for customers, partners, and consultants who are planning the migration of existing customized DFC-based applications. New and changed features are described, and the technical type and duration of the migration effort are provided for developers.

Upgrading DFC-based clients

Documentum's DFC-based clients such as Webtop utilize the WDK framework. Many customers have customized their implementations of WDK-based applications in order to obtain some desired feature or functionality. Such customizations can be expensive to maintain through the upgrade process and in fact may no longer be needed. You should evaluate your current implementation of DFC-based applications to see if any customizations can be eliminated through a migration to the most recent version of DFC and WDK.

Upgrading your implementations also means that you have an opportunity to re-implement your customizations to take greater advantage of the current features and capabilities of the product set as well as to ensure, as much as possible, that the customizations minimize the impact of future upgrades.

Documentum product direction

The next generation of Documentum products is increasingly focused on collaboration, Web 2.0, and social networking. In addition, many customers have asked for easier implementation and integration approaches, as well as better support for custom client and application development, such as mashups.

Beginning with the D6 release, EMC Documentum offered support for Services-Oriented Architectures (SOAs) via the Documentum Foundation Services (DFS), which is a true SOA framework enabling an entire new class of application development paradigms. On the back end, DFS utilizes the most recent version of DFC, the Java API set for Content Server. The next generation of client offerings from EMC Documentum will be based on DFS and thus completely SOA-based. This move toward SOAs may cause you to ask, "What about WDK- and DFC-based clients, and how do I best protect my investment in my Documentum implementations?"

Support for WDK in the future

EMC Documentum will continue to support WDK through the entire D7 era of releases – D7, D7.5, and further 7.x releases. Your current WDK-based clients will continue to function in the D7 era. However, the next generation of EMC Documentum clients will be based on DFS and will not utilize the WDK framework, so previously deployed WDK customizations will not be honored by the new services-based clients. How can you best prepare your infrastructure to minimize the impact of this transitory period? What does EMC Documentum recommend to help you avoid unnecessary duplication of customization work?

EMC publishes the *EMC Documentum 6.5 SP1 System Upgrade and Migration Guide*, which provides advice and information on planning your migration. Table 1 is intended as quick reference guide through the System Upgrade and Migration Guide. This guide will help you determine how to best implement a given type of functionality via customization while avoiding unnecessary duplication of that customization when it exists in the latest release of the WDK infrastructure. In addition, the recommendations contained in the System Upgrade and Migration Guide will provide you and your team with the best practices recommendations so that the effort required to upgrade to D7 is minimized. Lastly, the table and supporting detail pages in the System Upgrade and Migration Guide provide an effort estimate associated with each type of customization that should help you better plan your migration resource needs.

Migration summary

Some new features will change or replace existing behavior in your custom application. Information is provided in the *EMC Documentum 6.5 SP1 System Upgrade and Migration Guide* on how to implement the new features in your custom application or how to turn off the new behavior, depending on your requirements. You may find that some new features can replace your existing customizations out of the box or with very little configuration.

The *EMC Documentum 6.5 SP1 System Upgrade and Migration Guide* is strongly recommended.

The following table describes the major changes in version 6, 6.5, and 6.5 SP1 DFC clients to help you plan your application migration strategy. Use this table to find features in your current application that will need migration. Then look up the migration details in the migration guide for information on the steps that will be required to migrate that feature.

Table 1. Major changes in D6, D6.5, and D6.5 SP1

	Feature	Since	Effort*	What to change	Page # migration guide
WDK	Accessibility	6.5 SP1	mixed		57
	Autofocus		simple to moderate	JSP pages that have top-level frame	57
	Labels		moderate	Java properties files	58
	Checkboxes		none		58
	Datagrid row		simple	Datagrid configuration in JSP pages	58
	Import files		simple	One JSP page	58
	Timeout alert		simple	One XML file	58
	ACS, BOCS configuration	6.0	simple	One XML file	92
	Actions, display if invalid	6.0	simple	One XML file	87
	Autocompletion	6.0	simple to complex	JSP pages	85

	Feature	Since	Effort*	What to change	Page # migration guide
	Components deprecated	6.0, 6.5	complex	Complex to migrate customizations of deprecated components: keep or migrate	93
	Configuration	6.0	moderate	Replace config extensions with modifications	60
	Content transfer				
	Xfer per group	6.5	simple	One XML file	90
	Applet removed	6.0	complex	Replace customized applet	92
	Deployment	6.0	simple to moderate	Configure dfc.properties; deploy standard J2EE war file	60
	Email conversion on import	6.5	simple	One or two XML files	68
	Email migration	6.5	moderate	Migration tools	56
	Export, deep	6.5	simple	One XML file	89
	Inline refresh (Ajax)	6.0, 6.5	simple to moderate	One XML file and possibly multiple JSP pages	68
	IRM support	6.5 SP1	simple	One XML file	67
	Java class changes	6.0, 6.5 SP1	complex	Diff files on download site	57
	Keyboard shortcuts	6.0	simple to complex	One XML file, custom JSP pages	78
	Lifecycle enhancements	6.0	none		95
	Lightweight sysobjects	6.5	simple to moderate	One XML file, possibly multiple JSP pages	69
	Menus, creating	6.0	simple to moderate	Move from JSP page to XML file	61
	Menus, right-click	6.0	simple	Create XML page	76
	Modal pop-up dialog	6.5	moderate to complex	XML configuration and possibly server or client event handlers	64
	Notifications: read and change	6.5	simple	JSP pages	71
	OLE link-scanning	6.0 SP1	simple	One XML file	90
	PDF byte-serving	6.0 SP1	simple to moderate	One XML file plus all PDF files in repository	89
	Preferences persistent	6.0	none to simple	Configure repository or non-persistent preferences	87
	Presets	6.0	moderate	Migrate scoped definitions to presets	59
	Relationships--assign	6.0	none		95
	Renditions viewing app	6.0	simple	One XML file	91
	Roles precedence	6.0	simple	One XML file	72

	Feature	Since	Effort*	What to change	Page # migration guide
	Security: strong encryption	6.0	moderate	Triple DES tool, paste into config files	70
	Search value assistance	6.0	moderate	One custom JSP page to implement	94
	Streamline view	6.0	simple to complex	Deprecated: keep or migrate	92
	"Starts with" filter	6.0	simple to moderate	JSP pages	86
	Tab order	6.0	simple	JSP pages	83
	Themes deprecated	6.0	complex	Migrate if custom theme not based on documentum theme	93
	Toolbar hidden	6.0	simple	Revert in JSP page	77
	UCF enhancements	6.5	none	Initialization, thread management, performance	88
	UCF preload	6.5	simple	One XML file	
DFC					
	Access control tokens	6.0	simple	Configure in dfc.properties	54
	Aspects	6.0	moderate to complex	Extends object behavior and attributes	53
	Business objects	6.0	complex	Migrate customizations to BOF	51
	Char string truncation	6.0	simple	Throws error instead of quiet truncation	53
	Deployment	6.0	simple to moderate	WAR file	54
	DMCL API calls	6.0	complex	Migrate to DFC	52
	Full format specifications	6.0	moderate to complex	Methods no longer accept full format specifications	53
	Java class changes	6.0, 6.5 SP1	complex	Diff files on download site	51
	Native IPv4 operations	6.5	simple	2 settings	51
	Properties management	6.0	simple	JMX manages dfc.properties and DfPreferences	53
	Search results max	6.0	simple	Configure in dfc.properties	54
	Search service	6.0	moderate to complex	Build and run queries, mult. repositories	52
DFS	DAR files and Composer	6.5		Required for 6.5	

	Feature	Since	Effort*	What to change	Page # migration guide
***Effort Estimates:**					
Simple	Hours, configuration of one or a few files				
Moderate	Hours or days, configuration of multiple files or simple custom class				
Complex	Days or weeks, new custom class required				
For multiple configurations or customizations of the same type, multiply the effort estimate by the number of customizations to migrate.					

Conclusion

You can use this white paper to assist you in planning the upgrade of your DFC-based clients and migration of your customizations to version 6.5 SP1. When you have identified the features that you will need to migrate, use the *EMC Documentum 6.5 SP1 System Upgrade and Migration Guide* to plan details of the migration and more thoroughly estimate the development effort. The Documentum Web Development Kit (WDK) will continue to be supported in the future while you plan your eventual migrations to a service-oriented architecture.