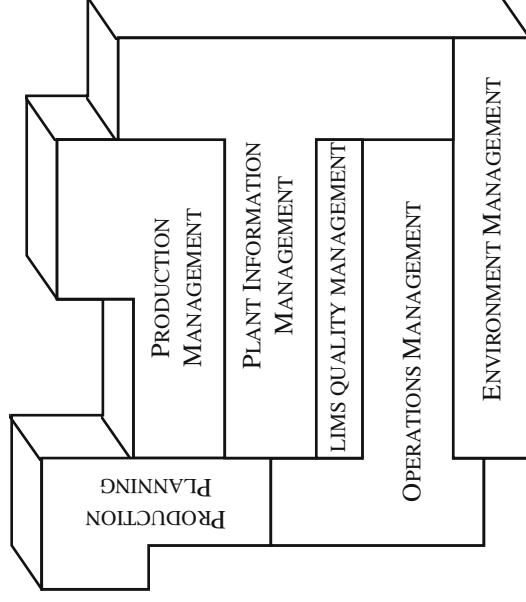


Course 5707 PHD Implementation



Copyright, Notices, and Trademarks

Honeywell IAC courseware is subject to change without notice.

This courseware is copyrighted and all rights are reserved by Honeywell Inc. These materials are intended for use solely in conjunction with Honeywell products. The materials comprising the courseware may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine readable form without the prior, express written consent of Honeywell Inc.

No Warranty: Honeywell Automation College provides no warranties respecting the program, documentation or services provided here under, either expressed or implied, including but not limited to any warranty of design, merchantability, or fitness for a particular purpose, even if Honeywell Automation College has been informed of such purpose. No agent of Honeywell Automation College is authorized to alter or exceed the warranty obligations of Honeywell Automation College as set forth in this agreement.

TotalPlant is a U.S. registered trademark of Honeywell Inc.

Other brand or product names are trademarks of their respective owners.

Honeywell
Industrial Automation and Control
Automation College
2820 West Kelton Lane
Phoenix, AZ USA 85053
1-800-852-3211

5907 Course Description

Process History Database (PHD) Implementation

This 5-day course is intended for persons who will administer and manage a PHD system. The course provides participants with knowledge of features, tools, and capabilities of the PHD system. The participants will learn how to create, maintain, and support the process history database, manage server disk space, and manage user privileges. Database backups are discussed. Throughout the course, hands-on exercises provide practical experience performing all of the major PHD administration and management tasks.

PHD tasks can be categorized among the following job roles:

PHD Administrator - Installs/configures client software, troubleshoots network/PC problems, and maintains system performance and security.

PHD Manager - Creates/maintains tag definitions, determines database access security, monitors archive disk usage, resolves data collector performance issues, troubleshoots DCS-related items, such as gateways and LCNP interfaces.

PHD End User - Retrieves process history data using standard PHD tools and windows-based desktop applications, and customizes applications as needed to support plant information requirements.

NOTE: We recommend that the site's PHD Administrator, PHD Manager, and lead PHD End User complete this training. To assist in the PHD installation process, they should complete their PHD training before the system is installed.

Prerequisites

The course prerequisites vary, depending on the participant's role at a particular site. If one person performs all of the PHD job roles, then that person should meet all of the following prerequisites:

PHD Administrator:

NT or Windows 95 (troubleshooting)

Technical background, knowledge of PC/network issues (such as TCP/IP connectivity)

Experience working with a relational database is helpful.

PHD Manager and lead PHD End User:

Plant, process, and DCS tag knowledge

NT, Windows 95, or Windows 98 (basic navigation)

MS Access (basic navigation and use of toolbar)

MS Excel (basic navigation and use of toolbar)

Some programming experience is helpful (conditional logic and data types)

Additional Training

PHD Options and Advanced Tag Loading - Course 5708

Uniformance Desktop - Course 5709

Day 1:				
Lesson	Objective	Topics	Resources	
PHD Introduction P51751 3 hours	Identify PHD system hardware and software components and their interrelationships.	-Role of PHD -System topology -System components -System data flow	-Presentation -PHD System Manual -PHD User Guide -PHD Functional Overview	
PHD Data Processing Overview P51752 1 hour	Recognize capabilities of PHD data processing and data retrieval functions.	-Data processing -Statistical gross error elimination -Data smoothing and noise gating -Data elimination and compression -Data quantization and scaling -Data retrieval -Engineering unit conversions -Time weighted data reductions -interpolation and extrapolation	-Presentation -PHD System Manual -PHD User Guide	
PHD Menu Overview P51763 ½ hour	Navigate PHD menus, online publications, and online help.	-Menu Structure -Toolbar	-Presentation/demonstration	
Tag Configuration And Tuning P51753 4 hours	Given configuration requirements, configure PHD tags and identify tag configuration errors.	-Tag Definition -Class Inheritance -Class Tag Definition -Tag Source Definition -Tag Definition Display -Tag Definition Update -Statistical PHDMAN reporting -Tag Data Monitoring/Tuning	-Presentation -Hands-on exercise -PHD System Manual -PHD User Guide	

Day 2:				
Lesson	Objective	Topics	Resources	
Virtual Tag Calculations P51756 4 hours	Configure virtual tag calculations.	-Forms -Calculation Syntax -Tag references and built-in functions -Calculation Examples -Common applications of virtual calculations -Monitoring calculation procedure (PRC) memory section	-Presentation -Hands-on exercise -PHD System Manual -PHD User Guide	
Manual Input, Data Put, and Data Routing P51765 3 hours	Configure PHD tags to accept manual inputs, download values to the DCS, and route data from one tag to another.	-Manual Input tag -Put Download -Screens to manually input/edit data -Data routing	-Presentation -Hands-on exercise -PHD System Manual -PHD User Guide	

Day 3:				
Lesson	Objective	Topics	Resources	
PHD Management and Support P51754 2 hours	Manage, monitor, and support PHD: -Start, stop, and verify PHD system processes. -Navigate and describe the types of files in the PHD directory structure. -Monitor and maintain RDI(s) -Plan, configure, and maintain history data storage (archive files)	-PHD architecture and structure -PHD MAN control -Monitoring PHD and interfaces -System Overview Monitoring -Real-time Data Interface Monitoring -Tag Data Queue Monitoring -PHD Integrity Monitoring -Starting/stopping interfaces and PHD server -Named parameters -Management reports -Security -Error logging -System tasks -Data archiving and recovery	-Presentation -Hands-on exercise -PHD System Manual -PHD User Guide -PHD/Oracle Backup Strategies	
PHD/Oracle Backup Strategies P51778 ½ hour	(Reference document only)	-Backup Types -Backup of Archives -Backup of Oracle -Example PHD Backup Procedures -Example PHD Backup Command Files	-Discussion	
Real Time Data Interface Management P51759 3 hours	Create and support PHD real-time data interfaces.	-RDI configuration/startup -Offset RDIs -Shadowed PHD systems	-Presentation -Hands-on exercise -PHD System Manual -RDI Functional Specification -PHD Capacity Planner (P51760)	

Day 4:				
Lesson	Objective	Topics	Resources	
PHD Tag Load - Part 1 P51755 4 hours	Perform a bulk tag load to configure tags in the PHD database.	<ul style="list-style-type: none"> -Overview of implementation steps -Create tag load input data file -Tag load forms -Tag Load Source System Config. Form -Tag Load Interface Configuration Form -Tag load Procedure 	<ul style="list-style-type: none"> -Presentation -Hands-on exercise -Tag Load User Manual 	
PHD Security P51764 2 hours	Configure PHD security.	<ul style="list-style-type: none"> -Users -Roles -User Roles (Profiles) -Role Permissions -Menu Access -PHD Security Configuration 	<ul style="list-style-type: none"> -Presentation -Hands-on exercise -PHD System Manual -PHD User Guide -Uniformance TPI Application User Guide 	

Day 5:		Lesson	Objective	Topics	Resources
		Uniformance Client Overview P51780 1 hour	Recognize the administration tasks required to support Uniformance Clients.	-Definition of each component -Logon requirements -Proxies	-Presentation/demonstration -Uniformance Client Installation Guide
		Overview of Uniformance Application Server P51772 1 hour	Control the execution of Uniformance applications through the sitedef/config.cfg file.	-Uniformance Application Server definition -Task scheduler -Schedule.dat file -Config.cfg file -Starting the task scheduler -Platforms for Uniformance Applications	-Presentation -Hands-on exercise -PHD User Manual -Uniformance Application Server Installation Guide
		Implement PHD Tag Database Synchronization P51769 2 hours	Perform the configuration to automatically update the PHD reference database with changes made to tag descriptions and ranges on the source system.	-Components and Data Flow -Tag sync Examples and Operation -Tag Source Configuration and Considerations -Scheduling Tag Sync -Tag sync Log	-Presentation -Hands-on exercise -PHD User Manual -Uniformance Application Server Installation Guide
		Overview of Relational to PHD and PHD to Relational P51771 3 hours	Transfer history data from PHD to relational tables in an Oracle RDBMS (PHD2Rel) and transfer values from an Oracle relational table to PHD history (Rel2PHD).	-PHD2Rel -Components and data flow -Implementation steps and configuration -Rel2PHD -Components and data flow -Inserting data into the Oracle table -Scheduling PHD2Rel and Rel2PHD	-Presentation -Hands-on exercise -PHD User Manual -Uniformance Application Server Installation Guide

Honeywell

Helping You Manage Your World

www.iac.honeywell.com