



Indian Health Service
Office of Information Technology

HEAT v8.4 Installation Guide

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DOCUMENT INFORMATION

Change History

Version	Date	Modified By	Comments
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DOCUMENT APPROVAL

This installation guide has been approved for distribution and implementation. These new procedures are effective immediately and will be enforced. Requests for corrections or changes to this document should be sent to the Indian Health Service Office of Information Technology (IHS OIT).

Approved by:

Dr. Theresa Cullen
CIO, IHS

Date

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1.0 Introduction

HEAT is a collection of modules that work together to provide a comprehensive service and support solution for the OIT Help Desk. HEAT is fully customizable. It provides all the tools you need to log and resolve calls, store information about customers, track information about performance, and generate detailed reports.

Two particular components within HEAT will help you work more productively:

- ♦ **Call Logging:** Provides the necessary tools for you to log, track, and resolve calls quickly and efficiently.
- ♦ **Alert Monitor:** A notification tool that alerts you when you receive new HEAT messages, assignments, or other conditions. Alert Monitor can be set up to notify you while you are away from your desk.

1.1 Administrator Notes

This Installation Guide describes the basic components and steps required for a successful installation of HEAT 8.4 on network and workstations.

Administrator Knowledge

This manual is written with the presumption that the administrator has already installed and is familiar with all of the HEAT modules.

User Knowledge

The user must have a basic understanding of databases and the Microsoft Windows operating system.

2.0 Installation Notes

It is important to understand the basic requirements described in this section before installing HEAT.

2.1 System Requirements

2.1.1 Server Requirements

Database Server Requirements

- ◆ On average, HEAT 8.4 requires 2–3 MB of hard drive space for every 1,000 records.
- ◆ All system requirements were developed using Microsoft SQL Server as the HEAT database application. When using other database applications, contact the database vendor for recommendations.
- ◆ Requires 175 MB of disk space for full HEAT installation.
- ◆ Database Management Software (DBMS)
 - Microsoft Access 2000/2002
 - Microsoft SQL 2000 Server Service Pack 2 or higher
 - Microsoft SQL 2005
 - Oracle 9i Release 1 (using the 9.01.3 driver)
 - Oracle 9i Release 2 (using the 9.2.0.1 driver)
 - Oracle 10g Release 2

Database Server Hardware Requirements

HEAT Database Server			
System	<500 MB	1-3 GB	>3 GB
CPU	Pentium III	Dual Pentium III	Contact Technical Support
Speed	733 MHz	733 MHz	
RAM	512 MB	1 GB	

Figure 2-1: Table of server hardware requirement information

2.1.2 Client Workstation Requirements

The following system recommendations are for user installations of the core HEAT modules (Administrator, Call Logging, Alert Monitor, etc).

Client Software Requirements

- ◆ Microsoft Windows 2000 Pro (SP 3 or higher) or Server (SP 3 or higher)
- ◆ Microsoft Windows XP Pro (SP 1a or higher)
- ◆ Microsoft 2003 Server

Client Hardware Requirements

HEAT Modules		
System	Minimum	Recommended
CPU	Pentium 200 MHz	Pentium II/III+
RAM	32 MB	64 MB

Figure 2-2: Table of client hardware requirement information

Note: HEAT requires 32 MB of RAM over and above the Microsoft requirements for the operating system.

2.2 Installation Types

This manual focuses on installation via use of the HEAT Open Database Connectivity (ODBC) Wizard. However, HEAT may also be installed by other means as described in the following section.

Two installation types are available as follows:

- ◆ **Administrative Installation:** Creates an image of the HEAT installer (usually on a shared network drive) from which end users can install to their local workstations. Running the End-User installation using an administrative image also simplifies future upgrades and patches.

Important: An Administrative installation makes an exact copy of the HEAT installer on the network location you specify.

- ◆ **End-User Installation:** Installs program files to an end user's workstation. (Users have the option of selecting either a Typical or Custom installation.) You can run this type of installation from either an administrative image on a shared network drive.

2.3 Setup Types

Two setup types are available for End-User installations:

- ♦ **Typical:** Installs HEAT's most common features, including Call Logging, and Alert Monitor.
- ♦ **Custom:** Allows the user to select specific modules and features for installation. The default installation of HEAT installs all features typical for a system administrator and/or manager.

2.4 Tips for Administrative Installations

Exit all programs running on your system. This frees memory and alleviates potential conflicts between the installer and other software on your computer.

Install HEAT to a shared network drive. This installs an administrative image of HEAT to a shared location.

Note: You must have Microsoft Windows Installer Service installed on your server in order to distribute HEAT to workstations by way of your server. If the HEAT installer does not find this program, it installs it. The installer prompts you for a reboot, if required.

2.4.1 License HEAT

Licensing registers HEAT and its numerous modules. Licensing is conducted through the Administrator module.

2.4.2 Quick Start Wizard

Configure your HEAT Database using *Quick Start Wizard*. Quick Start Wizard is a tool that helps first-time HEAT administrators initially customize a database to meet OIT's specific needs. The wizard helps create things such as Call Types, Configuration Types, and fields.

2.4.3 HEAT ODBC Wizard

Use the HEAT Open Database Connectivity (ODBC) Wizard. You can distribute your ODBC data source for use on an end user's computer by using the HEAT ODBC Wizard (located on the HEAT Installation CD).

Note: The HEAT ODBC Wizard does not map drives or perform driver-specific configurations. If your data source requires any special system configuration, this should be resolved before you install HEAT.

2.5 Tips for End-User Installations

Exit all programs running on your system. This frees memory and alleviates potential conflicts between the installer and other software on your computer. You should also exit the Microsoft Office shortcut bar and stop all services.

Install HEAT to an end user's workstation. The steps for an End-User installation are discussed in detail in the "Installing HEAT 8.4" section of this document.

Note: Microsoft Windows Installer Service and Microsoft Data Access Components (MDAC) 2.7 are required by HEAT. If you do not have these programs on the end user's workstation, the HEAT Installation Wizard informs you they are missing.

If the Microsoft Windows Installer Service is installed, you can install and configure HEAT by way of command-line options. Windows 2000 comes with the Windows Installer Service pre-installed.

3.0 Installing HEAT with the ODBC Wizard

Using the HEAT Open Database Connectivity (ODBC) Wizard is a quick means of distributing the ODBC data source for use on the end user's computer. You will find the HEAT ODBC Wizard on the HEAT installation CD.

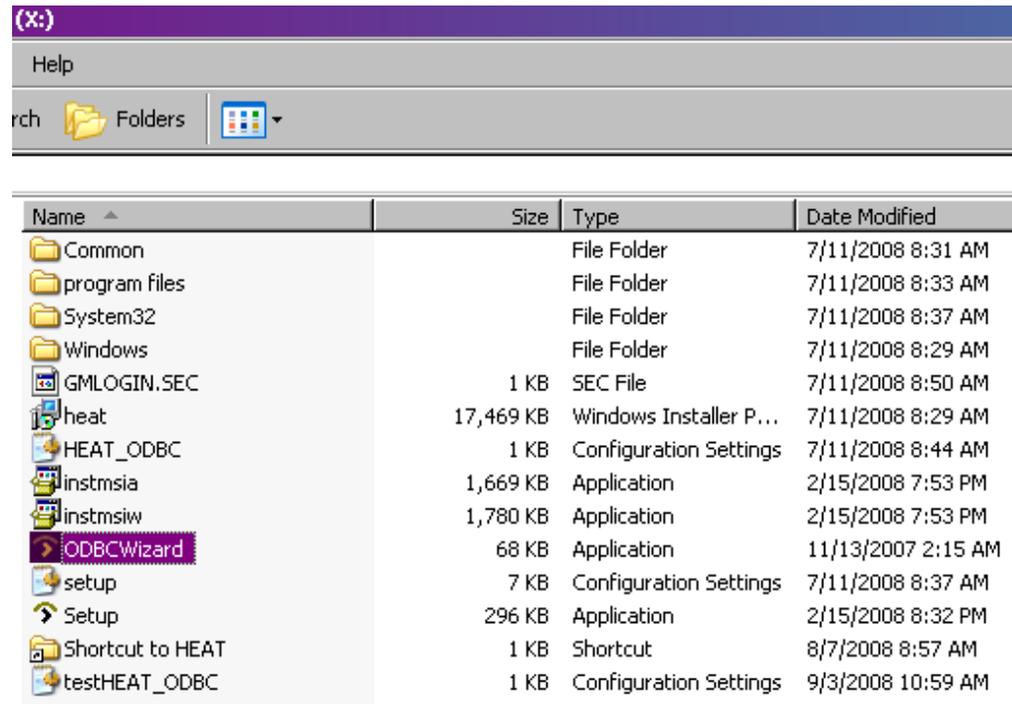


Figure 3-1: Sample of selecting the ODBC Wizard

Launch HEAT ODBC Wizard and follow the directions to create an *.ini* file containing the ODBC data source information. Then save the *.ini* file as *HEATODBC.ini* and place it in the administrative image directory.

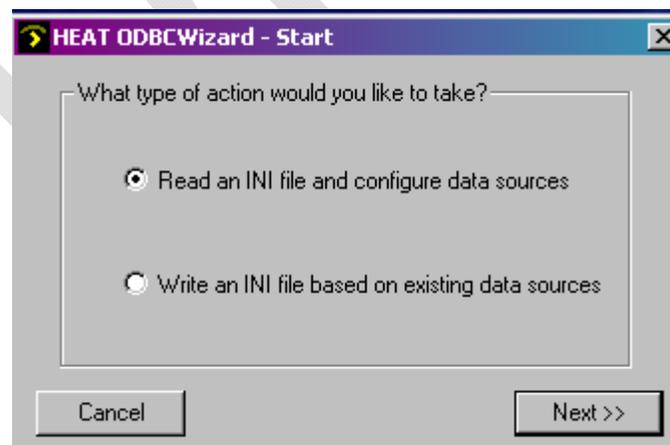


Figure 3-2: Sample of screen used for selecting an INI file

The data source is created on your end-user's computer during the installation process (assuming the required ODBC drivers are already installed and configured). This procedure eliminates the need to manually create a data source on each workstation.

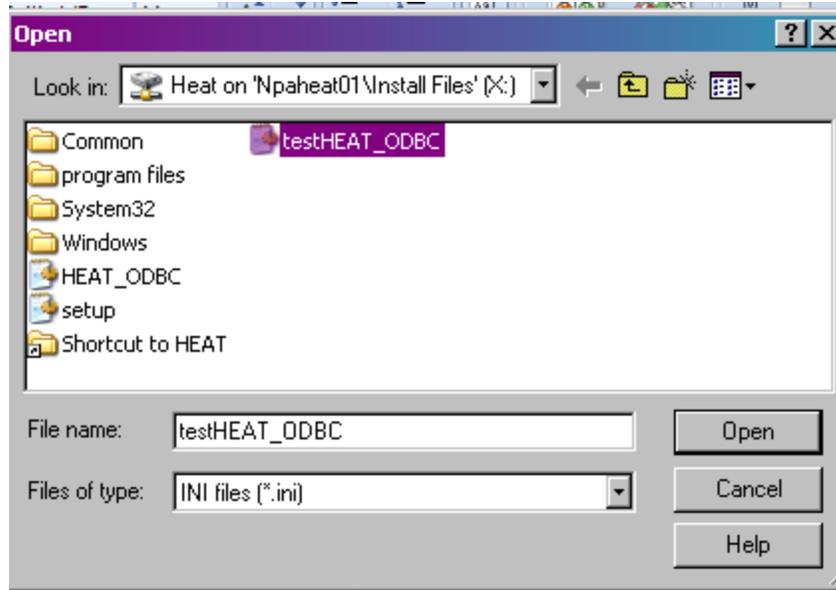


Figure 3-3: Sample of screen used to open test file

A confirmation window will appear when the configuration is complete.



Figure 3-4: Sample of window confirming configuration is complete

Go into the ODBC Data Source Administrator. Select the HEAT TEST data source.

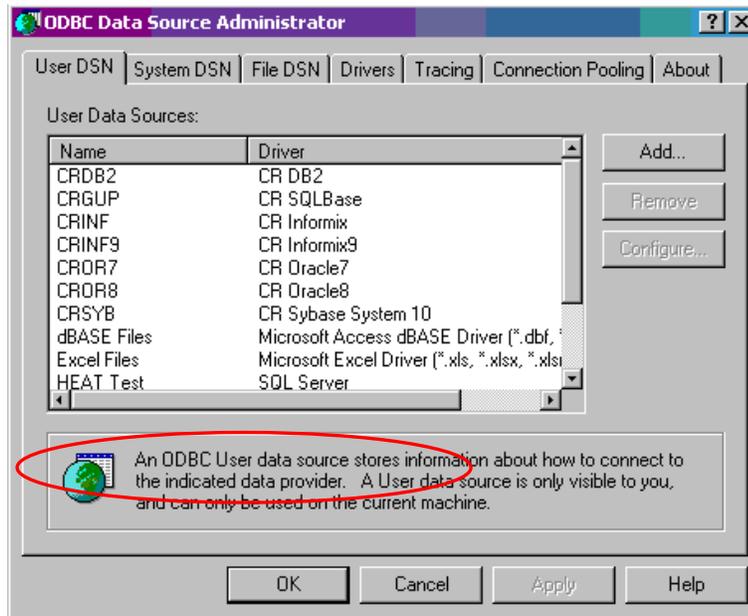


Figure 3-5: Sample of screen used to select the data source

Next you will be taken to a screen where you can create an ODBC data source for use in connecting to the SQL server.

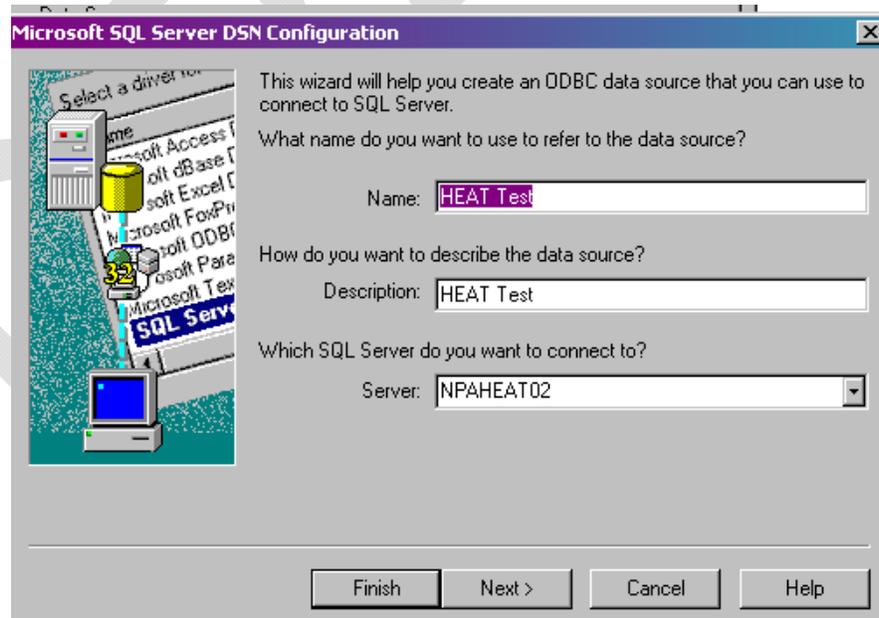


Figure 3-6: Sample of creating an ODBC data source

On the ODBC Data Source Administrator screen, select the *System DSN* tab. Make sure the driver shows *SQL Server*. Click the **Configure** button.

On the next screen you will tell the SQL Server by what means to verify the authenticity of your login ID. Select the option *With SQL Server authentication using a login ID and password entered by the user*.

At the Login ID box type **HEAT**. For Password type **cowboy23**.

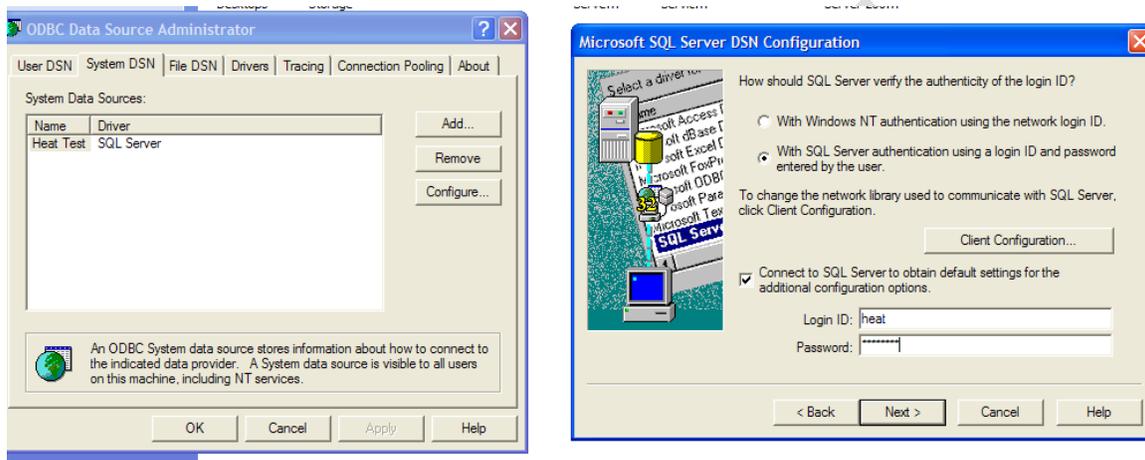


Figure 3-7: Sample of changing server configuration

Make sure the default database is “HEAT Test.” Click the **Next >** button.

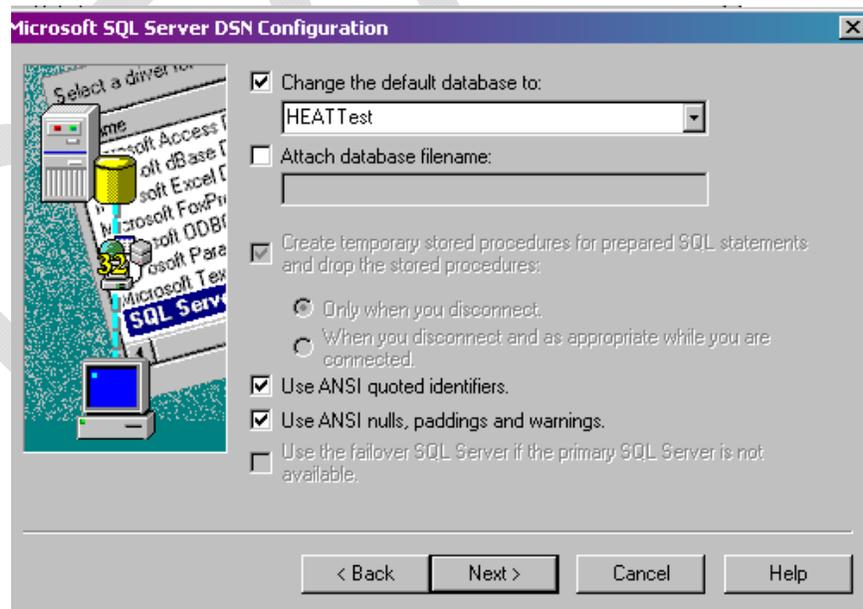


Figure 3-8: Sample of changing server configuration

To complete the wizard configuration, click the **Finish** button.

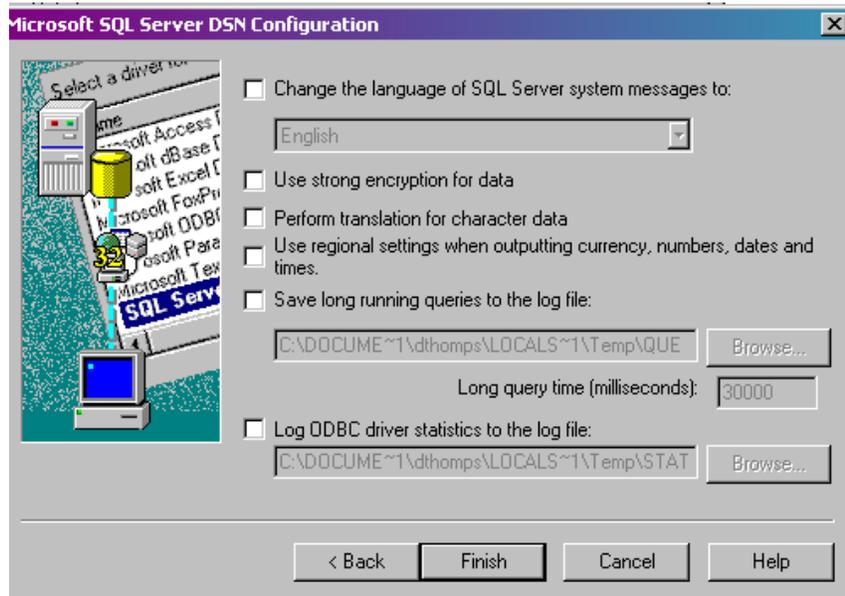


Figure 3-9: Sample of screen where wizard configuration is completed

Reminder: The HEAT ODBC Wizard does not map drives or perform driver-specific configurations. If your data source requires any special system configuration, this should be resolved before you install HEAT.

4.0 Configuring the XML File

4.1 Overview

The *HeatIntegrationBO.xml* file allows you to configure what data passes between HEAT and IT Service Management (ITSM) and to which ITSM database the data will pass. You may change the mappings in the XML file as needed. The *HeatIntegrationBO.xml* file is the foundation for the integration between HEAT and ITSM.

4.2 Configuring the XML File

The *HeatIntegrationBO.xml* file is located in the same folder as the HEAT application installation.

Each Business Object name is described in the *HeatIntegrationBO.xml* file and includes the data field mappings between HEAT and ITSM. The file also includes the search tags and view tags for the data fields.

4.3 ITSM Integration

You can integrate your HEAT database with your ITSM database by selecting the ITSM menu option in Call Logging. Selecting this menu option allows you to:

- ◆ Create a new problem or change
- ◆ View a problem, change, configuration item, or release
- ◆ Search for a problem, change, inventory, or release

4.4 Business Object Names

The *HeatIntegrationBO.xml* includes the following Business Object names:

- ◆ Problem
- ◆ Change
- ◆ InventoryItem
- ◆ ReleaseProject
- ◆ SLA

The *HeatIntegrationBO.xml* comes preconfigured with the mappings described in the following tables. Field mappings may be added as long as the validation constraints are followed. Validation constraints limit values in one field based on the value of another field. This pre-filtering feature is extremely useful for limiting validation choices in a field.

4.4.1 Problem Business Object Name

The field mappings in the following table are included in the *Problem Business Object Name*.

HEAT Field Name	FUSION Field Name	Field Description
Subject	Subject	Subject of the call
CallLog.CallDesc	Description	A description of the call
Search		
CallLog.CallDesc	Description	Searches for the call description
Relationship Key		
FusionProblemLink (HEAT Key Name)	RecID (Fusion Key Name)	Key names
Return Value		
CallLog.ProblemNumber	Problem Number	Problem number

Figure 4-1: Table of problem mapping information

- ◆ The HEAT object name in Fusion is CallLog
- ◆ The HEAT object search key in Fusion is CallID
- ◆ The search key for view is RecID

Search

Search (<SimpleSearch>) is the database field for the HEAT Object to be used in ITSM for searches.

Relationship Key

Relationship Key (<RelationshipKey>) is the database field in HEAT that links to the Business Object in Fusion.

4.4.2 Change

The following table contains field mappings that are included in the *Change Business Object Name*.

HEAT Field Name	FUSION Field Name	Field Description
Subject	Subject	Subject of the call
CallLog.CallDesc	Description	A description of the call
Search		
CallLog.CallDesc	Description	Searches for the call description
Relationship Key		
FusionChangeLink (HEAT Key Name)	RecID (Fusion Key Name)	Key names

Figure 4-2: Table of change mapping information

- ◆ The HEAT object name in Fusion is CallLog
- ◆ The HEAT object search key in Fusion is CallID
- ◆ The search key for view is RecID

Search

Search (<SimpleSearch>) is the database field for the HEAT Object to be used in ITSM for searches.

Relationship Key

Relationship Key (<RelationshipKey>) is the database field in HEAT that links to the Business Object in Fusion.

4.4.3 Inventory Item

The following table contains field mappings that are included in the *InventoryItem Business Object Name*.

HEAT Field Name	FUSION Field Name	Field Description
Search		
Profile.EquipType	Inventory Item Type	Searches for type of equipment/inventory
Relationship Key		
CustID (HEAT Key Name)	HeatCustID (Fusion Key Name)	Key names

Figure 4-3: Table of inventory item mapping information

- ◆ The HEAT object name in Fusion is HEATProfile
- ◆ The HEAT object search key in Fusion is CustID
- ◆ The search key for view is HeatCustID

Search

Search (<SimpleSearch>) is the database field for the HEAT Object to be used in ITSM for searches.

Relationship Key

Relationship Key (<RelationshipKey>) is the database field in HEAT that links to the Business Object in Fusion.

4.4.4 Release Project

The following table contains field mappings that are included in the *ReleaseProject Business Object Name*.

HEAT Field Name	FUSION Field Name	Field Description
CallLog.CallDesc	Scope	The description of the call
CallLog.CallType	Category	The type of call
Search		
CallLog.CallDesc	Scope	Searches for the call description
Relationship Key		
FusionReleaseProjLink (HEAT Key Name)	RecID (Fusion Key Name)	Key names

Figure 4-4: Table of release project mapping information

- ◆ The HEAT object name in Fusion is CallLog
- ◆ The HEAT object search key in Fusion is CallID
- ◆ The search key for view is RecID

Search

Search (<SimpleSearch>) is the database field for the HEAT Object to be used in ITSM for searches.

Relationship Key

Relationship Key (<RelationshipKey>) is the database field in HEAT that links to the Business Object in Fusion.

5.0 Command-Line Options

The executable program *Msiexec.exe* interprets Microsoft Windows Installer packages (.msi files) and installs products. Note that Msiexec also sets an error level on return that corresponds to the Win32 error codes. The following information lists the command-line options for this program. You may set one or more properties on the command line after any switches.

Note: You can only install and configure HEAT by command-line if the Microsoft Windows Installer Service is already installed. Windows 2000 comes with the Windows Installer Service pre-installed.

5.1 Option Parameters

- ♦ /I Package|ProductCode: Installs or configures a product.
- ♦ /f [p|o|e|d|c|a|u|m|s|v] Package|Product Code: Repairs a product. This option ignores any property values entered on the command line. The default argument list for this option is 'pecms'.
 - p: Reinstalls only if the file is missing.
 - o: Reinstalls if the file is missing or if an older version is installed.
 - e: Reinstalls if the file is missing or an equal or older version is installed.
 - d: Reinstalls if the file is missing or a different version is installed.
 - c: Reinstalls if the file is missing or the stored checksum doesn't match the calculated value. Repairs only those files that have *msidbFileAttributesChecksum* in the Attributes column of the File table.
 - a: Forces the reinstallation of all files.
 - u: Rewrites all required user-specific registry entries.
 - m: Rewrites all required computer-specific registry entries.
 - s: Overwrites all existing shortcuts.
 - v: Runs from source and re-caches the local package.
- ♦ /a: Package Administrative installation option: Installs a product on the network.
- ♦ /x Package|ProductCode: Uninstalls a product.
- ♦ /L [i|w|e|a|r|u|c|m|o|p|v|+|!]Logfile: Specifies path to log file. The flags indicate which information to log.

- i: Status messages
 - w: Nonfatal warnings
 - e: All error messages
 - a: Start-up of actions
 - r: Action-specific records
 - u: User requests
 - c: Initial UI parameters
 - m: Out-of-memory or fatal exit information
 - o: Out-of-disk-space messages
 - p: Terminal properties
 - v: Verbose output
 - +: Append to existing file
 - !: Flush each line to the log
 - “*”: Wildcard, log all information except for the v option. To include the v option, specify “/!*v”.
- ♦ /m filename: Generates an SMS status .mif file. Must be used with either the install (-i), remove (-x), administrative installation (-a), or reinstall (-f) options. The ISMIF32.DLL is installed as part of SMS and must be on the path.

The fields of the status .mif file are filled with the following information:

- Manufacturer: Author
- Product: Revision Number
- Version: Subject
- Locale: Template
- Serial Number: Not set
- Installation: Set by ISMIF32.DLL to “DateTime”
- InstallStatus: “Success” or “Failed”
- Description: Error messages in the following order:
 1. Error messages generated by installer.
 2. Resource from msi.dll if install could not commence or user exit.
 3. System error message file.

4. Formatted message: “Installer error %i”, where %i is error returned from msi.dll.
- ♦ /q n|b|r|f: Sets user-interface level.
 - q, qn: No UI
 - qb: Basic UI
 - qr: Reduced UI with a modal dialog box displayed at the end of the installation.
 - qf: Full UI with a modal dialog box displayed at the end.
 - qn+: No UI except for a modal dialog box displayed at the end.
 - qb+: Basic UI with a modal dialog box displayed at the end. The modal box is not displayed if the user cancels the installation.
 - qb-: Basic UI with no modal dialog boxes. Please note that /qb+- is not a supported UI level.
 - ♦ /? or /h: Displays copyright information for the Windows Installer.

5.2 Available Properties

ADDLOCAL=: Comma-delimited list of features including one or more of the following:

- ♦ ALL: Installs all HEAT modules
- ♦ Call_Logging: Installs Call Logging
- ♦ Alert_Monitor: Installs Alert Monitor
- ♦ First_Level_Support: Installs First Level Support
- ♦ HEAT_User_Guide: Installs the HEAT User Guide
- ♦ HEAT_Administrator_Guide: Installs the HEAT Administrator Guide
- ♦ HEAT_Installation_Guide: Installs the HEAT Installation Guide
- ♦ Administrator: Installs HEAT Administrator
- ♦ LoadDB_Utility: Installs the LoadDB Utility
- ♦ Quick_Start_Wizard: Installs the Quick Start Wizard
- ♦ Business_Rule_Editor: Installs the Business Rule Editor

- ◆ Answer_Wizard: Installs Answer Wizard
- ◆ HFWFunctions: Makes HEAT functions available to Crystal Reports.

REMOVE=: Comma-delimited list of features including one or more of the following:

- ◆ ALL: Uninstalls all HEAT modules
- ◆ Call_Logging: Uninstalls Call Logging
- ◆ Alert_Monitor: Uninstalls Alert Monitor
- ◆ First_Level_Support: Uninstalls First Level Support
- ◆ HEAT_User_Guide Uninstalls the HEAT User Guide
- ◆ HEAT_Administrator_Guide: Uninstalls the HEAT Administrator Guide
- ◆ HEAT_Installation_Guide: Uninstalls the HEAT Installation Guide
- ◆ Administrator: Uninstalls HEAT Administrator
- ◆ LoadDB_Utility: Uninstalls the LoadDB Utility
- ◆ Quick_Start_Wizard: Uninstalls the Quick Start Wizard
- ◆ Business_Rule_Editor: Uninstalls the Business Rule Editor
- ◆ Answer_Wizard: Uninstalls Answer Wizard
- ◆ HFWFunctions: Removes HEAT functions from Crystal Reports
- ◆ INSTALLDIR=: The path to which you should install HEAT

Important: The INSTALLDIR value does not have to be DOS-compliant. You can include a long path. If your long path includes spaces, then the INSTALLDIR value must be in quotes. For example (INSTALLDIR="C:\ProgramFiles\HEAT").

Example: To install HEAT Call Logging and First Level Support to C:\HEAT with only essential user interface (progress dialog and severe errors), use the following command line:

```
Msiexec.exe /ix:\HEAT.msi /qb-  
DDLOCAL=Call_Logging,First_Level_Support INSTALLDIR=C:\HEAT
```

Important: The command must be all on one line.

6.0 Glossary of Selected Terms and Acronyms

Term	Definition
Alert Monitor	A notification tool that alerts you when you receive new HEAT messages, assignments, or other conditions.
Call Logging	Provides the necessary tools for you to log, track, and resolve calls quickly and efficiently.
ITSM	Information Technology Service Management
ODBC	Open Database Connectivity. A standard that facilitates connections between different types of databases.
Problem Ticket	A ticket created by a customer, or on behalf of a customer, to have something that the customer already possesses or has installed that is broken or malfunctioning and needs to be fixed.
Relationship Key	The database field in HEAT that links to the Business Object in Fusion.
Service Ticket	A ticket created by a customer, or on behalf of a customer, to have something created, changed, issued, or anything else that does not fit the description of a problem ticket.
Technician	A person responsible for an action on a help desk ticket.
Ticket	Contains the complete history and status of a customer service request, problem, critical problem, or change request. Tickets are used to assign, track, record, and report on an individual ticket's progress.
Ticket Number	A unique reference number assigned by the system to a help desk ticket.

7.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the IHS OIT Help Desk by:

Phone: (505) 248-4371 or (888) 830-7280

Fax: (505) 248-4297

Web: <http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm>

E-mail: support@ihs.gov

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