

IBM Information Management

IBM Informix Dynamic Server (IDS) Cheetah v11.10: Deployment Wizard

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Term Definitions and References

References are indicated by this format [term], where the [terms] are listed in alphabetical order with reference information in Reference section at the end of the document.

1 Introduction

1.1 Current Deployment Scenarios

The IBM Informix Dynamic Server (IDS) installation currently provides users with only two install options: a Typical installation and a Custom installation. The Typical installation installs the entire IDS product and does not allow for any customization. The Custom installation, on the other hand, allows users to customize IDS installation, such as specifying a non-default target server name and number. Neither installation setup type enables users to reduce the installation size by removing IDS functionality they do not require.



The disk footprint of IDS is considerable—Enterprise Edition installation is a little over 270 MB on most platforms. Many independent software vendors (ISVs) who embed IDS or are considering a relational database to embed into their applications do not need all the functionality and features in IDS and would want the installation footprint to be as small as possible. This small footprint could contain all the functionality that they require for their applications.

Currently, many ISVs do indeed customize the IDS installation for lower footprint according to the requirements for their applications by deleting all the files pertaining to the features of IDS that they do not plan to use. From IBM's point of view, this is not a recommended approach, and this customization is not supported by IBM Support. Hence, there is a growing need for breaking the IDS product into much smaller, supported installable units.

1.2 Deployment Wizard – Rationale

No customer works with all IDS features and functionalities for a single IDS instance. In practice, all IDS customers work with only a part of the product's capabilities. For example, one customer might use Enterprise Replication and other features within IDS, but might never have the need to use the extra locales provided in Global Language Support (GLS) that ships in the current product. A different customer might need to use GLS, but would use some but not all of the Performance Monitoring Utilities. The Deployment Wizard allows customers to choose features to install at a fine level of granularity.

Further, a segment of IDS customers are looking at IDS as a database that can be embedded within their applications. This again requires a much smaller footprint for IDS to be on the target system. IDS is also being viewed as IBM's premiere product for the embedded-database sector of the market.


The Deployment Wizard focuses on these aspects of customer issues and addresses them by providing a way for customers to pick and choose the features and functionalities that they want to use and hence install on their target systems.



2 Details about the Deployment Wizard


2.1 High-Level Description

The Deployment Wizard is a customizable installation option suited for users who have the technical abilities to complete a Custom installation setup and to identify the IDS features required for their systems. The Deployment Wizard caters to the customers' need of smaller IDS footprint on disk by doing the following:

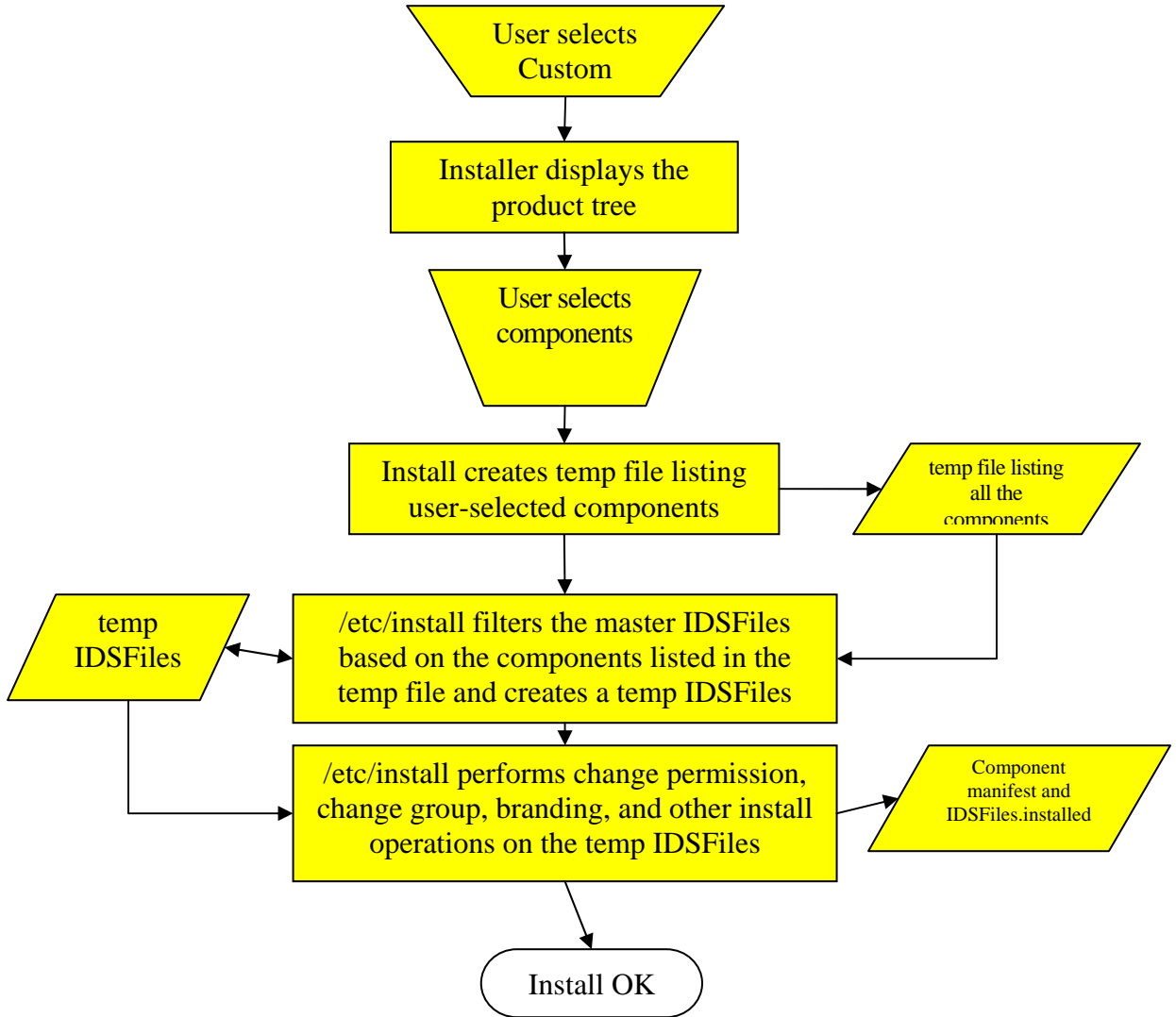
- ◆ Dividing IDS into multiple components based on functionality
- ◆ Dividing most components into subcomponents to allow more granular customization
- ◆  Determining and automatically enforcing the dependencies between components
- ◆ Providing information on which features are contained in which components
- ◆ Providing the amount of disk space a component or subcomponent would require

2.2 High-Level Sequence Diagram

A customized installation involves the following actions:

1. The user chooses the Custom installation setup option.
2. The Deployment Wizard displays the product tree showing components.
3.  The user chooses components to install.
4. The Deployment Wizard displays the installation summary, including the estimated disk space size.

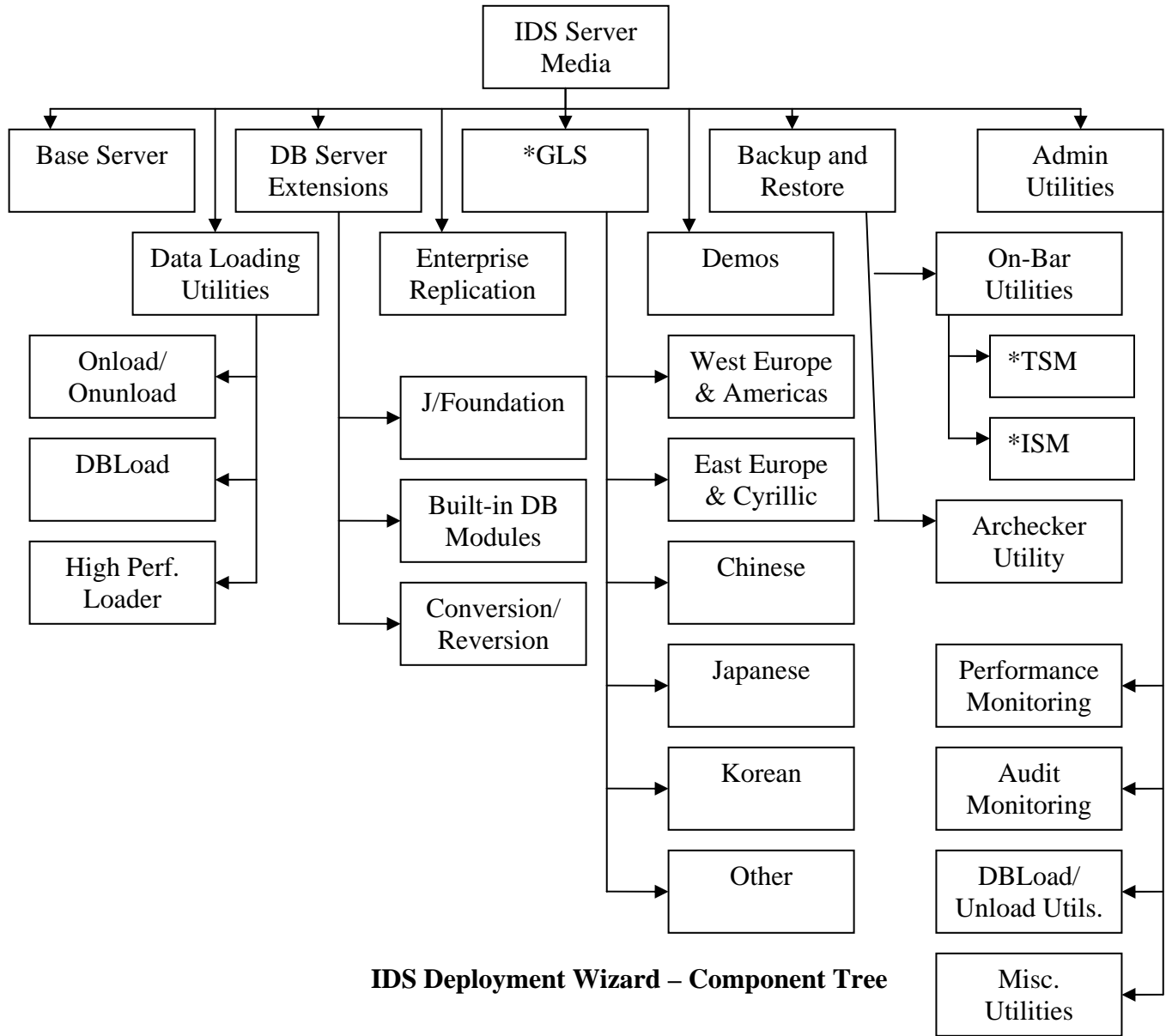
5. The installation program installs the selected and dependent components and creates a manifest file.



2.3 High-Level Component Breakdown

The new release of IBM Informix Dynamic Server (IDS) is now broken down into discrete, installable components which users can pick and choose at the install time to suit their application and deployment needs. The figure below details this breakdown.







*GLS=Global Language Support, TSM=Tivoli Storage Manager, ISM=Informix Storage Manager

2.4 The Deployment Wizard – Highlights

Deployment Wizard – IDS Cheetah

The Deployment Wizard is an enhancement to IDS installation for customers who want a minimal footprint on their target systems and/or wish to use IDS as an embedded database where footprint on disk is of high importance. Key highlights of the Deployment Wizard are the following:

- Users can pick and choose the features that they wish to have with their IDS installation.
- Users can easily add or remove features/components of IDS after the first IDS installation without having to install the core “Base Server” component of IDS again. This means that you can add or remove components from an existing INFORMIXDIR.
- This option is available only for users that select the Custom installation setup.
- Deployment Wizard is supported in all the installation modes: GUI, command line (console), and silent mode on UNIX/Linux; and GUI and silent mode on Windows.
-  The installer automatically determines if a component requires any other interdependent components and installs them. 
- The installer maintains a log in the form of a manifest file, which keeps information about what components have been installed at any given point in time.
- Users can use the manifest file as the basis for a silent installation.
- Users can choose to install additional components at any time.
- IDS provides meaningful messages if a user attempts to use functionality belonging to a component that is not installed.

- Both the console and the GUI modes adhere to all accessibility standards.

3 Usage Scenarios

While a flexible deployment tool has been requested mainly by ISVs and partners who wish to embed IDS into their applications, the new installer can be exploited in many ways to benefit a larger user group. Many other typical usage scenarios can benefit from the following aspects of the Deployment Wizard:

- Support for a much smaller footprint into applications that require an embedded database
- Faster installation when fewer components are selected for installation
- Streamlined installation over a multihost network

4 Limitations of the Deployment Wizard

While the Deployment Wizard addresses the customer concern of reducing the installation size, certain limitations need to be highlighted. A few of these limitations are due to technical reasons, but IBM is considering how a future release could remedy some of these footprint issues:

- While upgrading from an older version of IDS, it is always recommended that customers install the Cheetah (version 11.10) version in a new INFORMIXDIR location in order to use the Deployment Wizard.
- IBM does not plan to support repackaging of IDS in the Cheetah release. Because ISVs repackage IDS with their applications, ISVs will not get a direct benefit of smaller footprint with this version. Repackaging support is planned for a future release.



Deployment Wizard – IDS Cheetah

- All components within the same IDS installation must be at the same version level.
- In order for UNIX/Linux-platform users to exploit this functionality for future installations, IBM recommends that the `rm -rf` option not be used for uninstalling. Instead, UNIX/Linux sites need to use the Java-based uninstaller.