



Information Distribution Service (IDS)

- **Avoid Vendor Lock-In:** IDS provides a standards based interface for messaging, completely buffering business logic from the underlying messaging implementations.
- **Simplify Messaging Development:** IDS hides the back end details (complexity) of the messaging implementation by providing a simple, standards based interface for message subscription and publishing.
- **Protect Critical Data:** IDS provides secure messaging through Role Based Access Controls.

*WS-Notification
Open Standards
Interface*

*Product
Independent
Messaging*

*Portable JSR-
168 Compliant
User Interfaces*

*Message
Security*

*Software
Developers Kit
(SDK)*

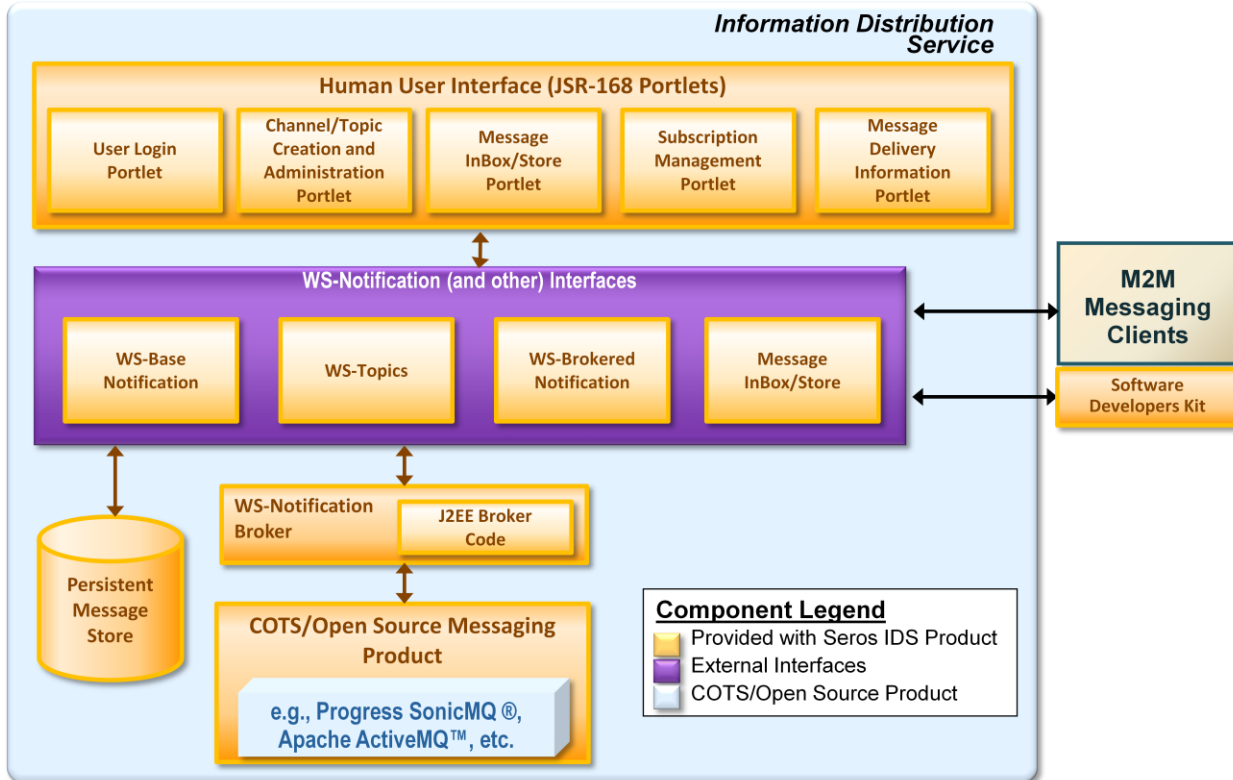
What is IDS?

Seros Information Distribution Service (IDS) is a highly reliable machine to machine messaging system based on open standard web services. The IDS web service messaging interface is an implementation of the WS-Notification specification. It provides synchronous and asynchronous delivery of XML based messages as well as per-subscription message transformation and protocol adaptation. IDS currently includes the ability to deliver messages over SOAP based web services, SMTP (Email), and Jabber (Instant Messaging).

IDS also provides additional administrative web services such as the Topic Administration web service. These services can be used to create and manage message topics and their associated access control policies.

IDS messaging and administrative functionality are available through included JSR-168 Portlets. These Portlets interface only through the IDS web services and, as a result, any functionality seen in the Portlets is available for external integration.

IDS Architecture



Layer 1: Layer 1 is the Human User Interface layer. It is provided by a set of JSR-168 compliant portlets that allow human users to directly interact with the web services interface layer. Figure 7 represents the portlets that are currently provided with the IDS product.

Layer 2: Layer 2 is the web services interface layer as defined by the appropriate WS-* open standard. In the case of IDS, this is the WS-Notification specification.

Layer 3: Layer 3 is the Seros developed and tested brokering software. In the case of IDS, this is the brokering software for the WS-Notification specification.

Layer 4: Layer 4 is the COTS/Open Source product (or products) used to provide the basic functionality for the web service interface layer (Layer 2). Example COTS/Open Source messaging implementations include Apache™ ActiveMQ™, Progress® SonicMQ®, or Oracle® ESB.



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Key Capabilities and Features

WS-Notification Open Standards Interface

This interface is based on SOAP web services as described by the WS-Notification Interface Standard. For each interface, one or more web services are provided, and each web service is fully described by a WSDL file. WS-Notification can be composed with WS-Security and WS-Reliable Messaging to create a secure and reliable commodity messaging capability.

WS-Notification Broker

The WS-Notification Broker implementation connects the WS-Notification web service interfaces to one (or more) back-end COTS or Open Source Products, such as Progress® SonicMQ®, Apache™ ActiveMQ™, or Oracle® ESB.

Back-End COTS/Open Source Product(s)

These components provide the desired behavior of the WS-Notification Interface Standard. In most cases, the Seros COTS products support more than one back-end product. For example, the Information Distribution Service (IDS) supports Progress® SonicMQ®/ESB or Oracle® ESB for enterprise-level deployments, JBOSS Messaging/ESB for medium-level deployments, and Apache™ ActiveMQ™ for small deployments where costs must be kept low.

Set of JSR-168 Portlets

JSR-168 compliant portlets are used to create the human user interface for the appropriate WS-Notification Interface Standard. The JSR-168 portlets allow human users to utilize the Seros commodity capabilities without having to develop and test software clients. For IDS, this includes a Messaging Inbox and data store to allow human users to subscribe to, receive, and view messages.

Software Developers Kit (SDK)

The IDS Software Developers Kit allows software engineers to easily and rapidly create client and/or application software that utilize the IDS capabilities. Specifically, the SDK provides a level of abstraction for the WS-Notification based a web service interface that simplifies programming to the interfaces. However, if desired, programmers can directly program to the native web services and operations specified by the appropriate WS-Notification web services and operations.

High Performance

IDS provides a scalable architecture with throughput and performance a key consideration in all design and implementation decisions. IDS offers a high performance messaging solution, without sacrificing security or interoperability.

Message Security

Through the use of Role Based Access Controls (RBAC), IDS will ensure messages reach their intended recipients, and only their intended recipients. IDS allows customizable access controls to provide maximum security and flexibility.



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Technical Specifications

Open Standards	WS-Notification WS-BaseNotification WS-BrokeredNotification WS-Topics WS-ReliableMessaging WS-Addressing WS-Management JSR-168 (Portlets)
Supported Products	Apache™ ActiveMQ™ Progress® SonicMQ® JBoss® Oracle® ESB IBM® Websphere®
Supported Databases	<i>Any SQL Compliant Data Solution Can Be Used. Existing Connectors Include:</i> Apache™ Derby™ Oracle® MySQL®
Supported Server Operating System	Red Hat® Enterprise Linux®

Contact Us

For more information about the Information Distribution Service, or any of the other Seros products, please visit us at www.seros.com, or call 719-599-8150 ext. 168 to speak with a Seros representative.