

SAP NetWeaver

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Introduction:

Since SAP Business Suite, the company SAP introduced a new integrated technology platform called SAP NetWeaver. In older version the basic SAP platform is called as basis. Using Sap NetWeaver the productivity and efficiency of an Organization can be improved a lot.

SAP NetWeaver Provides the technical foundation for SAP applications. In addition, it delivers a portfolio of enterprise technology that allows you to extend your applications to reach more people to adopt new processes, devices and consumption models. SAP NetWeaver helps you improve team productivity and business integration, enable you to simplify and manage your IT environment, and reduce operational costs so that IT resources are free to focus on business innovation.

Using SAP NetWeaver technology platform, you can perform activities in the following areas:

1. Team Productivity
2. Information Management
3. Business Process management
4. Compositions
5. SOA Middleware
6. Foundation Management

SAP NetWeaver supports a variety of user interfaces and collaboration tools. You can accommodate different work styles and roles for best user experience with:

1. **SAP NetWeaver Portal:** This is to provide role-based views that span your enterprise, enabling everyone to take full advantage of information resources. SAP NetWeaver Portal unifies key information and application to give users a single view that spans IT silos and organizational boundaries. It allows you to take full advantage of all your information resources, and maximize the returns on IT investments. With SAP NetWeaver Portal you can quickly and effectively integrate SAP solutions, third party applications, legacy systems, databases, unstructured documents, internal and external web contents and collaboration tools.

SAP NetWeaver Portal is flexible and secure, and enables you to take full advantage of your information assets. Features and functions include:

- i. Innovative Web Interface
 - ii. Collaboration
 - iii. Knowledge management
2. **SAP NetWeaver Gateway:** To enable developers to create Innovative, People-centric applications that link business users to SAP Software. Social Media, Mobile applications and new wave of applications all are dramatically changing the face and pace of personal lives. This technology is your key for enabling employees, customers, suppliers, and

consumers to connect SAP systems from any environment and through devices. It is designed to be used with existing SAP systems without disrupting their current IT landscape and while maintaining the integrity and security of their core systems.

SAP NetWeaver Gateway technology:

- i. Extends the reach of SAP business applications
 - ii. Promotes new ways of working
 - iii. Empowers developers with no SAP software knowledge by leveraging industry standards
 - iv. Enables innovation without disruption
3. **SAP NetWeaver Enterprise Search:** It Provides a simple and secure gateway to enterprise information and processes. When the world you work in changes, you have to change the way you work. In today's knowledge-based economy, a growing class of users is driving the need for faster, simplified access to critical business information. The SAP NetWeaver Enterprise Search application helps business users navigate critical business information by enabling seamless, secure access to SAP and non-SAP information and processes. Through a simple, Web-based search interface, the application delivers highly relevant results and suggested actions that reflect the end user's role in the enterprise and recognize the business context.

Using the SAP NetWeaver Enterprise Search application, you can:

- i. Improve decision making
- ii. Save time and money
- iii. Increase corporate policy compliance
- iv. Improve employee satisfaction

SAP NetWeaver includes a comprehensive set of Components, Tools and Applications:

1. Components:

- I. **SAP NetWeaver Application Server:** Supports platform-independent Web services, business applications, and standards-based development, enabling you to leverage existing technology assets for Web-services-oriented solutions
- II. **SAP NetWeaver Business Warehouse:** Enables you to integrate data from across the enterprise and transform it into practical, timely business information to drive sound decision making
- III. **SAP NetWeaver Gateway:** Enables developers to create applications that link business users to SAP software from any environment and through any device
- IV. **SAP NetWeaver Master Data Management:** Ensures cross-system data consistency and helps integrate business processes across the extended value chain
- V. **SAP NetWeaver Process Orchestration:** Helps improve processes, from simple workflows to integrated processes that span applications and organizational boundaries; includes capabilities for business process management, business rules management, and process integration

- VI. **SAP NetWeaver Portal:** Unifies critical information and applications to give users role-based views that span the enterprise, enabling you to take full advantage of your information resources
- VII. **SAP Auto-ID Infrastructure:** Gives you all the capabilities you need to integrate all automated sensing devices – including RFID readers and printers, Bluetooth devices, embedded systems, and bar-code devices
- VIII. **SAP NetWeaver Identity Management:** Addresses access and provisioning issues facing a typical enterprise, creates a new opportunity for integrating business processes, and helps you to integrate systems in a heterogeneous IT environment
- IX. **SAP NetWeaver Information Lifecycle Management:** Allows you to archive data in a readily accessible format according to regulatory retention rules that you define

2. *Tools:*

- I. **Adaptive Computing Controller:** Provides a central point of control for assigning computing resources and optimizing their use
- II. **SAP NetWeaver Composition Environment:** Provides a robust environment for design, deployment, and running of composite applications that comply with a service-oriented architecture
- III. **SAP NetWeaver Developer Studio:** Offers a convenient user interface and rich functionality for developing J2EE applications
- IV. **SAP NetWeaver Visual Composer:** Simplifies the creation of portal content and analytics applications, enabling business analysts to build or customize applications using a visual user interface rather than manual coding
- V. **Sap Solution Manager:** Facilitates technical support for distributed systems with functionality that covers all key aspects of solution deployment, operation, and continuous improvement

3. *Applications:*

- I. **SAP NetWeaver Enterprise Search:** Provides a simple and secure gateway to enterprise objects and transactions
- II. **SAP NetWeaver Single Sign-On:** Offers a comprehensive single sign-on solution, enabling re-use of a person's initial authentication for subsequent log-ins to all applications

SAP NetWeaver Application Server: Supports platform-independent Web services, business applications, and standards-based development, enabling you to leverage existing technology assets for Web-services-oriented solutions.

Features and functions of SAP NetWeaver AS (Application Server) include:

- i. Security
- ii. Persistence layer support Deployment

- iii. Scalability, performance, and high availability
- iv. Software logistics and life-cycle management

SAP NetWeaver AS works with other advanced functionality of the SAP NetWeaver technology platform in a rich, unified development and deployment environment for Java applications.

SAP NetWeaver AS interoperates with:

- i. SAP NetWeaver Developer Studio
- ii. SAP NetWeaver Portal
- iii. SAP NetWeaver Process Orchestration

Unique IT Benefit:

SAP NetWeaver also delivers a broad range of IT benefits, which include:

- I. ***Sustainable Cost Structure:*** SAP NetWeaver reduces total cost of ownership across the IT landscape. It enables you to leverage your existing IT investments, including SAP and non-SAP systems. Flexibility reduces the cost of change, while integration knowledge reduces the need for consulting services.
- II. ***Improved development:*** With SAP NetWeaver, you can compose new business processes on top of existing systems by using an enterprise service-oriented architecture based on Web services, Java, and other industry standards.
- III. ***Reduced TCO across the entire IT landscape:*** SAP NetWeaver technology components are integrated in a single platform and come preconfigured with business content, which reduces complexity and supports IT standardization and consolidation. The components also integrate readily with SAP applications, which reduce the need for custom integration.
- IV. ***Easy development of extensible best practices:*** SAP NetWeaver supports communication, knowledge management, and collaboration across existing systems. You can take advantage of existing skills to improve current practices or develop new functionality.

BUSINESS BENEFITS:

SAP NetWeaver is the open integration and application platform that aligns people, information, and processes. Business benefits include:

- I. ***Flexible business strategies:*** With SAP NetWeaver, you have the flexibility, visibility, and control to effectively execute, monitor, and refine corporate strategies.
- II. ***Innovative business processes:*** The platform powers innovative, industry-specific software and allows you to recompose existing systems to support innovative processes.
- III. ***Superior business value:*** SAP NetWeaver provides a business-focused infrastructure that supports continuous improvement of processes. It minimizes the risk and cost of introducing new processes, because existing systems remain unchanged while you leverage them for end-to-end enterprise processes.

- IV. **Improved business performance:** SAP NetWeaver helps you aggregate and analyze information across the organization, so you can gain the insight needed to make the right changes.
- V. **Unmatched user experience:** Solutions built with SAP NetWeaver provide an efficient user experience through a role-based portal interface. With SAP NetWeaver, you can extend business processes to all employees, suppliers, and customers.

SAP NetWeaver is the open integration and application platform that integrates people, information, and processes. It powers not only SAP Business Suite but also partner solutions and customer custom-built applications. SAP NetWeaver aligns IT with the business and lowers the total cost of ownership of your IT infrastructure.

With SAP NetWeaver, you benefit from support for the following technologies and strategies:

- I. **Java:** SAP NetWeaver provides complete support for Java technology.
- II. **Web Services:** SAP NetWeaver extends the syntax and standards of Web services to enable enterprise services.
- III. **Open Standards:** SAP NetWeaver provides an open integration and application platform that reflects SAP's commitment to industry standards and interoperability.
- IV. **Security:** SAP offers security mechanisms to meet your needs for data integrity, protection, and confidentiality.
- V. **Globalization:** SAP NetWeaver supports business and legal requirements around the world.
- VI. **Microsoft .NET Interoperability:** SAP NetWeaver offers interoperability, openness, and extensibility for Microsoft .NET.
- VII. **IBM WebSphere Interoperability:** SAP NetWeaver offers interoperability, openness, and extensibility for IBM WebSphere.
- VIII. **Accessibility:** SAP works to make SAP NetWeaver and our solutions accessible to people with disabilities.

SAP NetWeaver supports several technologies like Microsoft .NET, Oracle Java EE, and IBM Web Sphere for customizations and other extending processes for customers. So the customers can use their current IT infrastructure for using SAP and they don't need to invest more for IT infrastructure for their SAP implementation. Using NetWeaver and organization can improve their operational efficiency and can make faster decision making by accelerated business information access. Smooth end-to-end business and high process quality and efficiency are also some advantages of NetWeaver Platform.

References:

- 1. www.sap.com
- 2. www.scn.sap.com