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Introduction to Oracle Identity Management

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Web applications are great ...

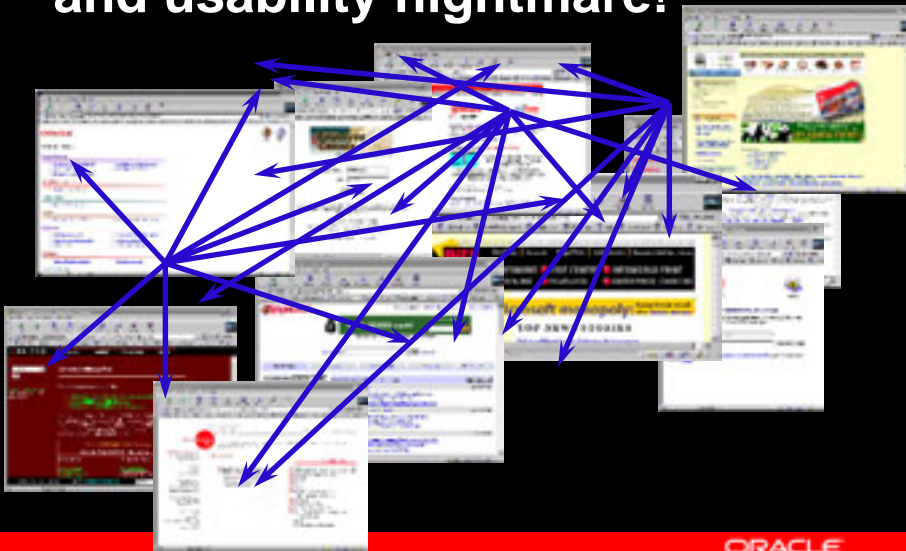
- Inexpensive to develop
- Easy to deploy
- Access anywhere



BUT

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**...but can be an administrative
and usability nightmare!**



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Web application problems

- **Administrative problems**
 - Efficiently provisioning users for applications
 - Limited/no ability to delegate administration
- **Usability problems**
 - Different user names/passwords
 - Little/no personalization of portal content
- **Security problems**
 - Inconsistent password management policies
 - Fragmented security policy enforcement

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The Solution: Identity Management

- Identity management is the process by which
 - Users are provisioned for enterprise applications
 - Application user roles and permissions are managed
 - Users manage profile information such as application preferences, passwords and PINs
 - Applications (such as Portals) are personalized for individual users



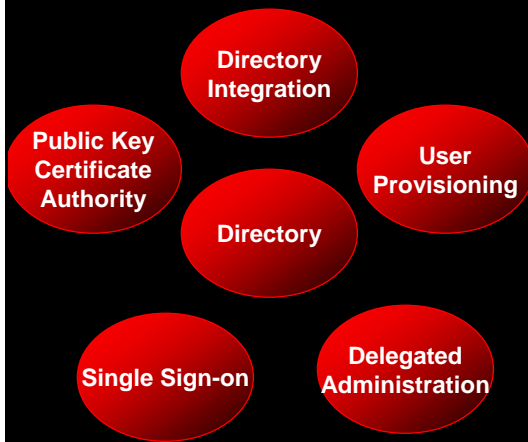
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Benefits of an Integrated Identity Management Solution

- For Administrators
 - Lower costs and improved accuracy in user provisioning
 - Better security through centralized management of security policies and authorizations
 - Scalable administration through delegation
- For users
 - Improved productivity through quicker access to applications
 - Improved usability with single user identity and credentials and application personalization

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Oracle Identity Management

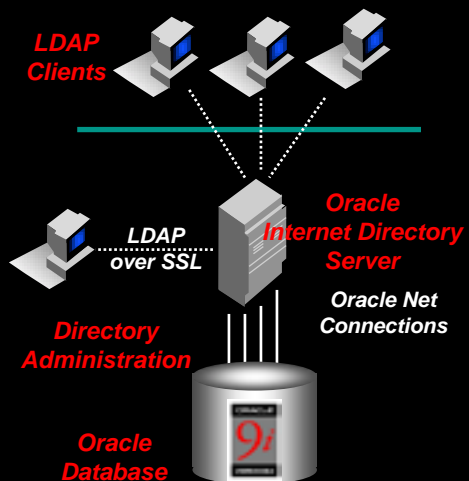


- Integrated identity management for all Oracle products
- Highly robust and scalable identity management platform for the enterprise
- Open interfaces and standards for third party interoperability

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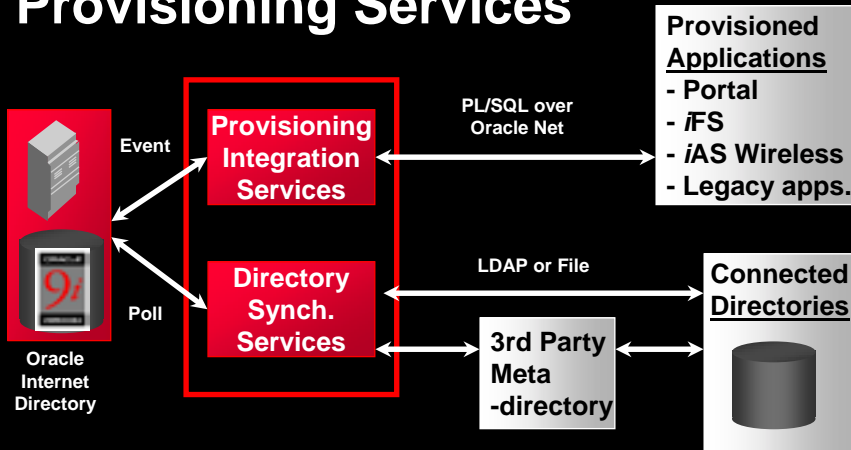
Oracle Internet Directory

- Scalability
 - Millions of user entries on single server
 - 1000's of simultaneous clients
- High availability
 - Multimaster replication
 - Oracle9i hot backup/recovery
- Security
 - Sophisticated security model based on access control lists
- Standards-based
 - Native LDAPv3 implementation



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Oracle Directory Integration/ Provisioning Services



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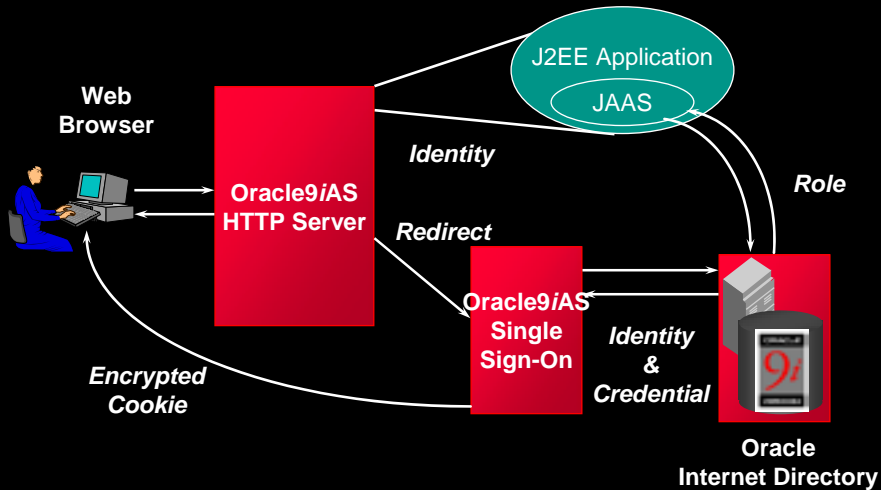
Delegated Administration Services



- New directory feature with Oracle9iAS V2
- Provides a consistent interface for directory content administration
 - Administrative tool: supports application administration delegation
 - End-user tool: Set passwords, preferences, whitepages

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Oracle9iAS Single Sign-On Authentication



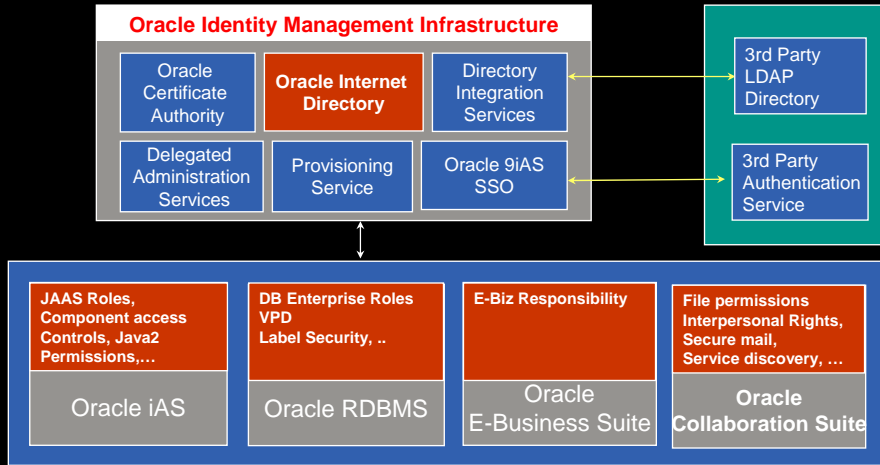
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Oracle Certificate Authority

- New component with Oracle9iAS Release 9.0.4
- Out-of-the-box PKI solution for X.509v3 digital certificate provisioning
- Leverages Oracle9iAS Single Sign-On, Oracle Internet Directory

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Oracle Identity Management – Putting it Together



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Oracle Internet Directory

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What are Directory Services?

“A flexible, special-purpose distributed database designed to enable the storage and retrieval of entry-oriented information for a wide range of applications”



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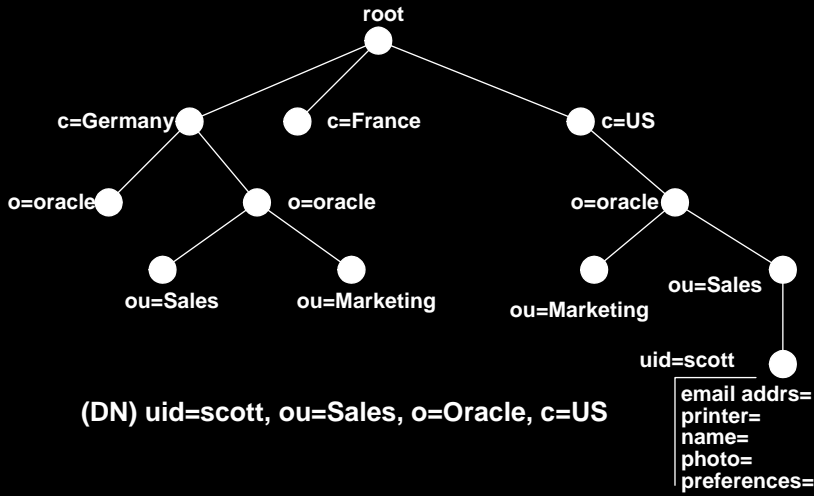
Databases vs Directories

- Table oriented
- Location specific data
- Application- consistent naming policies
- Performance emphasis on transactions
- Entry oriented
- Global data
- Globally consistent naming policies
- Performance emphasis on retrieval

Conclusion: Usage model determines design choices

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Distinguished Names (DN) Form a Hierarchy



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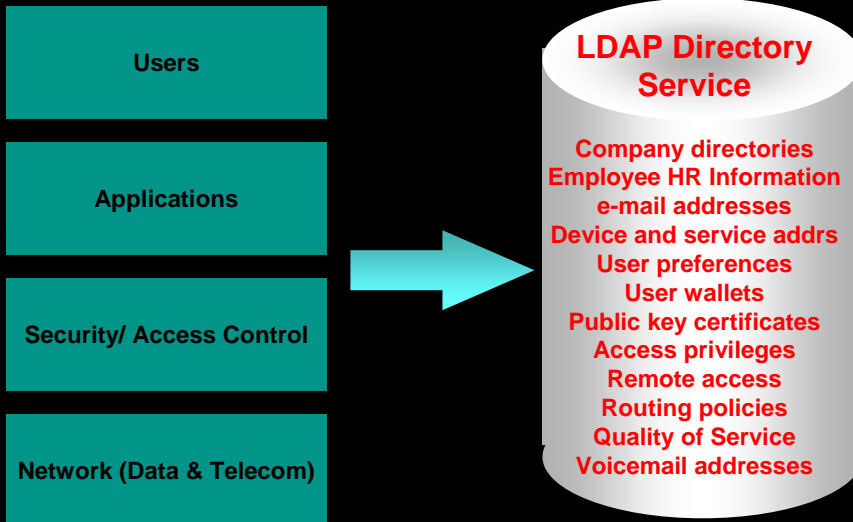
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LDAP: The Standards-based Solution

- Directory service standard based on the ISO X.500 specification
 - Uses the X.500 information model
- Lightweight, browser-friendly client implementation
- Protocol standard defined and maintained by the IETF
- Need for interoperability is driving rapid adoption
- Everyone is integrating with it

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Directory Integration Solution



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Integration Strategies and Tools

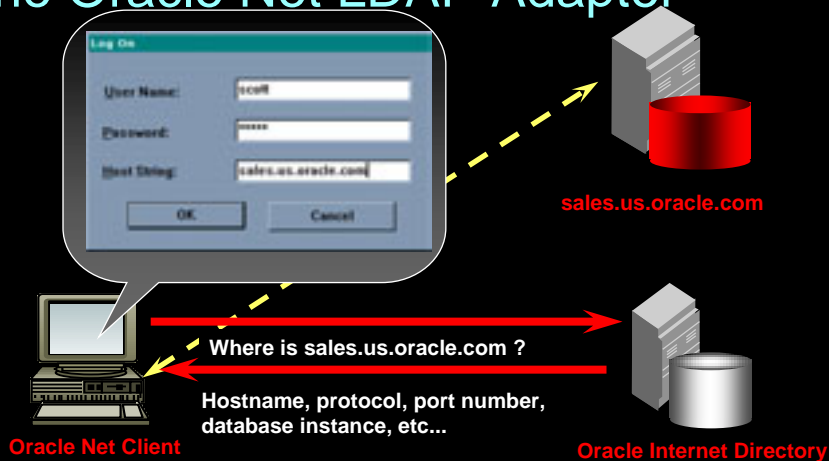
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Oracle Identity Management – Important Points

- Essential, integrated infrastructure for the entire Oracle product stack (Database, Oracle9iAS, e-Business Suites, Oracle Collaboration Suite)
- Enterprise identity management infrastructure for third-party and custom applications

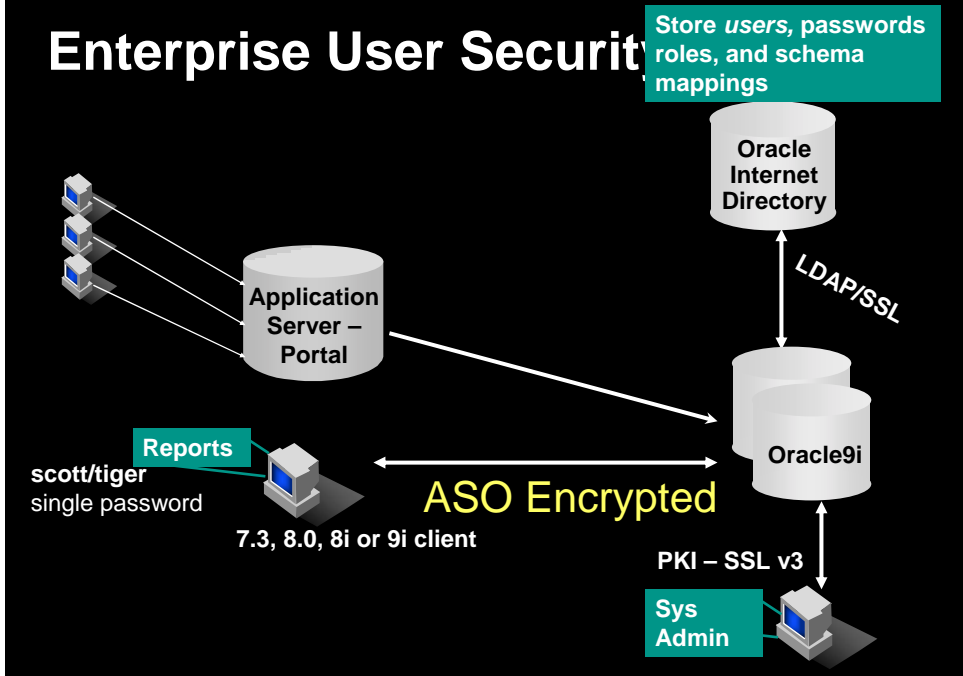
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Directory-Enabling Oracle Products The Oracle Net LDAP Adapter



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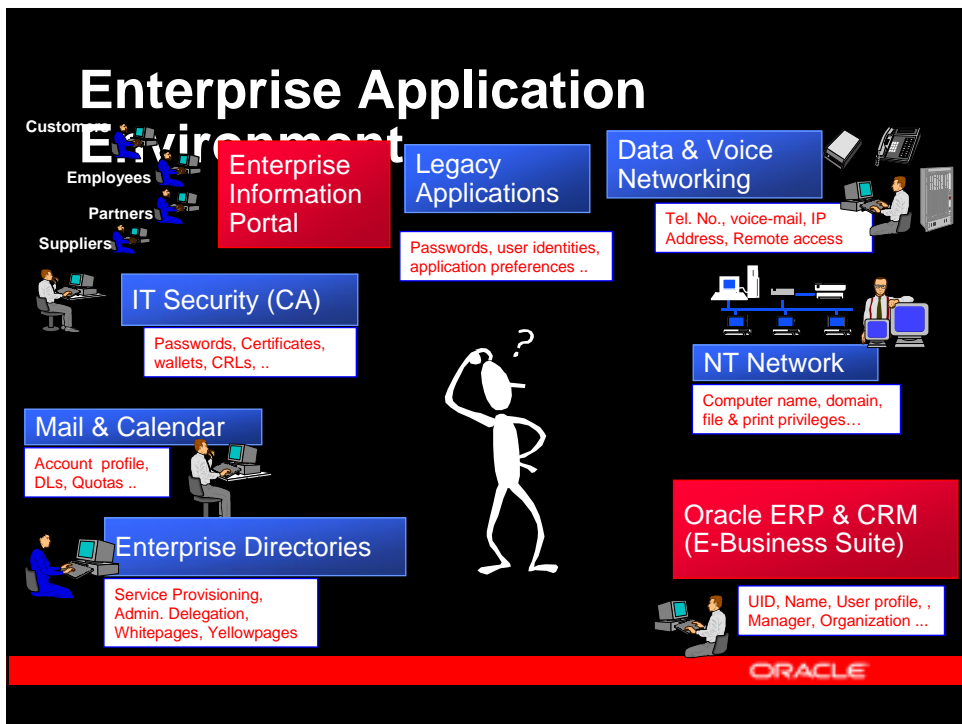
Enterprise User Security



Oracle9iAS Component Integration

Oracle9iAS R2 Component...	...uses OID to store:
Oracle9iFS	User ids, passwords
Oracle9i Unified Messaging	Userids, pwds, preferences, buddylists, dlists, greetings
JAAS (Authorization Toolkit)	Authorization profiles
Oracle9i Single Sign-On Server	User ids, passwords
Oracle9i Reports, Oracle Forms Info	User, resource ACL
Oracle9i Portal	User, group attributes
Oracle9iAS Wireless Edition	User, common user

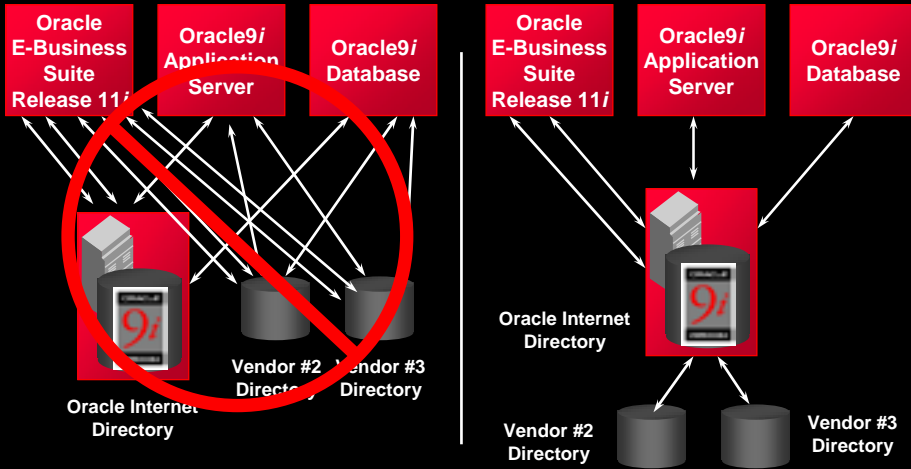
attributes administration



Problems We Need to Solve

- For administrators
 - Consolidation of user identities
 - Application user provisioning/de provisioning
 - User access administration
 - Consistent security policies
- For users
 - Minimum number of credentials to manage
 - Application “single sign on”
 - Unified account self management

Directory Integration Approaches



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Windows Integration

Current Integration Capabilities
& Future Directions

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Current Oracle Windows Integration Points

- “Fat client” integration options
 - NTS Authentication
(Oracle9i Database on Windows only)
 - Oracle Advanced Security Kerberos Support
 - Microsoft Key Distribution Center (MSKDC)
 - Oracle Advanced Security SSL Support
 - Authentication with X.509 certificate
 - May be issued by Microsoft Certificate Store (MCS)
- “Thin client” integration options
 - Certificate based authentication with Single Sign On

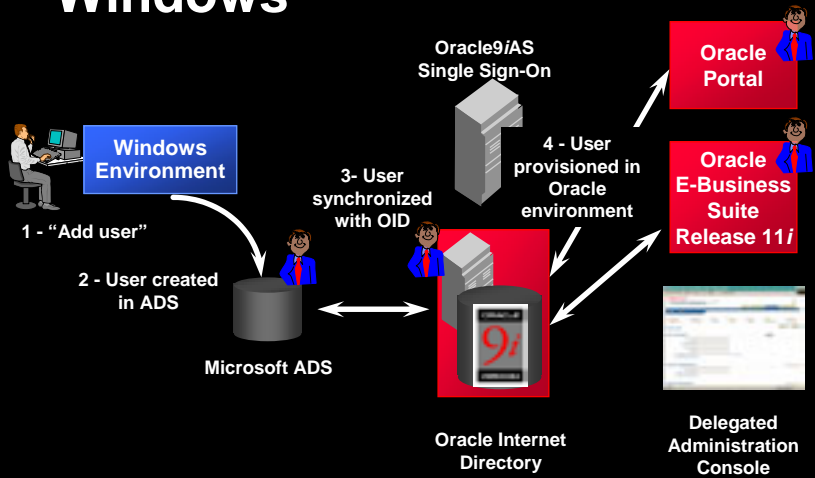
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Windows Integration Tools Under Development

- Windows Directory Connector for Oracle Internet Directory
 - Pre packaged solution for Windows directories
 - Built on Oracle Directory Integration Platform
- Windows Authentication Plug-in
 - “Referral” of authentication to Windows O/S
 - Removes requirement for password synchronization
- Windows Password Modification Plug-in
 - Permits update of Windows passwords from Oracle administration tools

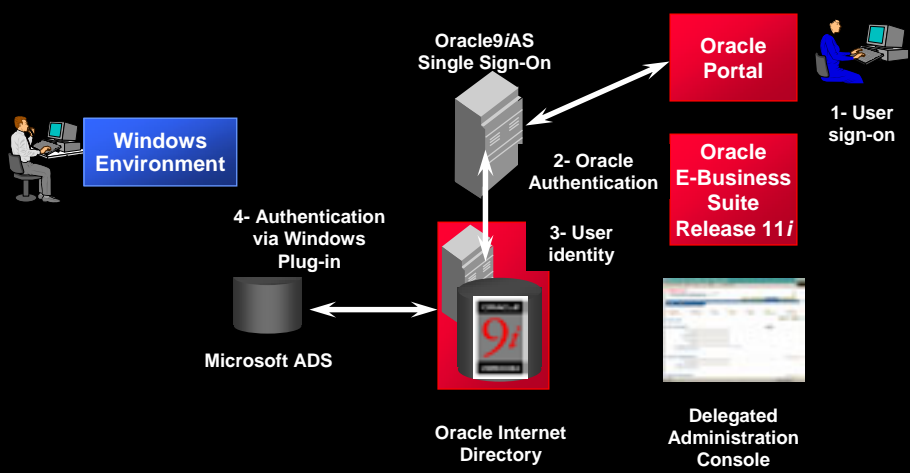
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User Provisioning from Windows



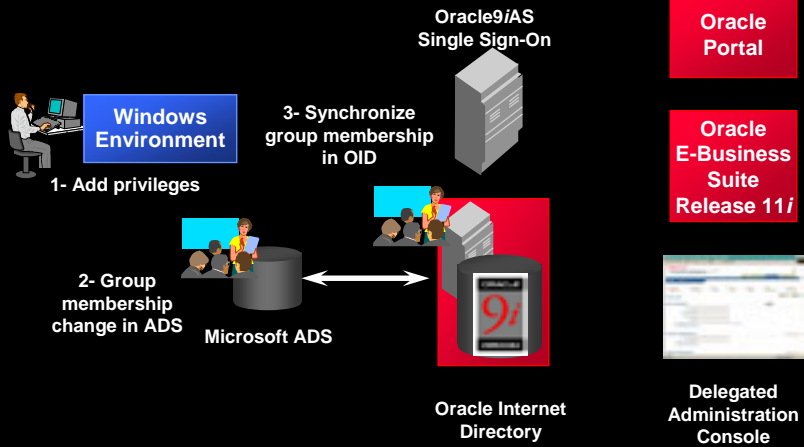
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User Sign-On to Oracle



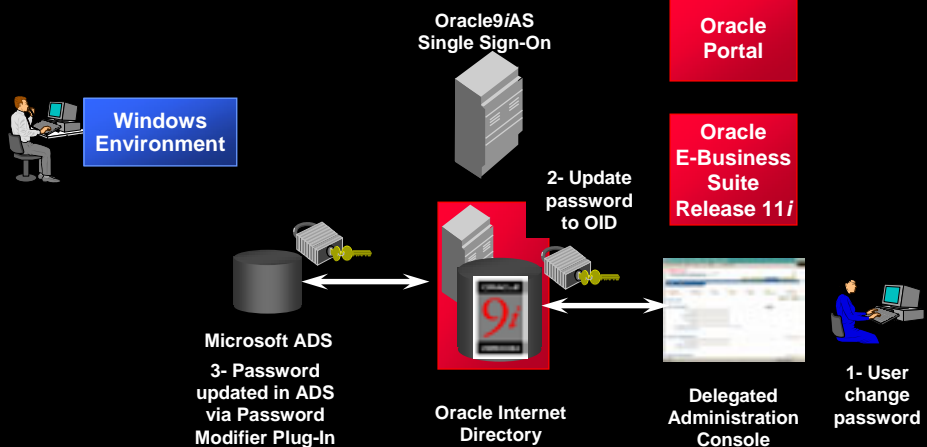
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User Privileges Update



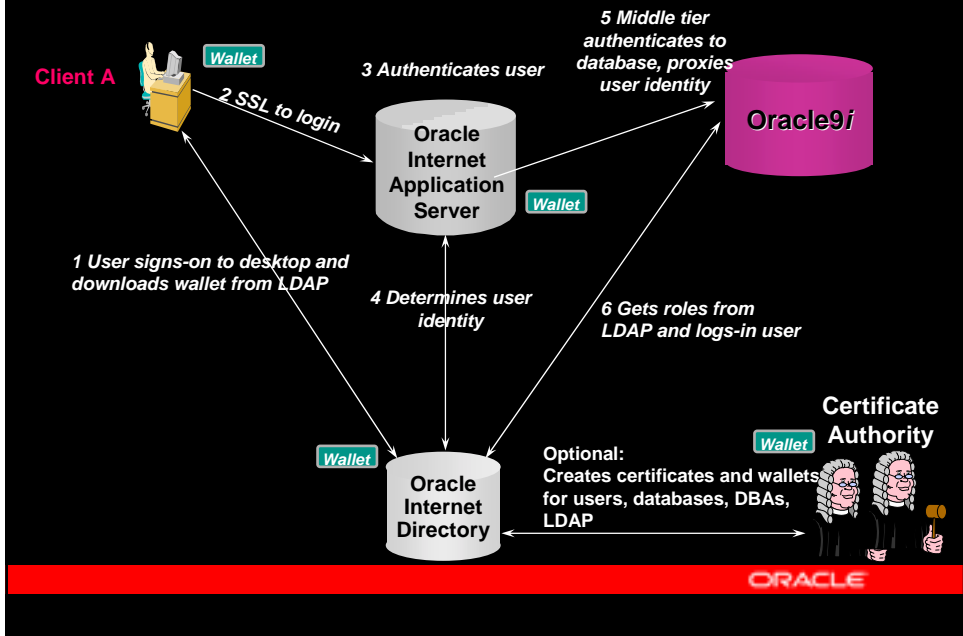
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User Password Update



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User Login : Complete Picture



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&
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