ENTRUST IDENTITYGUARD™ VIRTUAL APPLIANCE
Two-Factor Authentication - Simple to Deploy, Easy to Use

Attacks on the enterprise are becoming more frequent and sophisticated, and legacy identity and authentication approaches are an increasingly ineffective deterrent while also being cumbersome for end users. Entrust Datacard helps Financial Institutions, Governments and Enterprises alike move beyond passwords with solutions that are seamless to deploy, easy to use, and affordable.

THE ENTRUST IDENTITYGUARD VIRTUAL APPLIANCE
As mobile becomes the preferred way to access resources, Entrust Datacard offers a simple, secure way for employees to access workstations, networks and websites from any location. Our broad range of authentication solutions include mobile push notifications—one of the most secure and convenient authentication methods available.

Businesses today are being challenged to offer secure access to a broader array of services and applications while guarding against growing threats. IT resources are limited and the systems to support strong authentication continue to grow in scope and complexity. With outdated solutions that will not support evolving IT needs, organizations must look towards flexible, strong authentication solutions that can be deployed quickly—without negatively impacting IT.

The Entrust IdentityGuard Virtual Appliance provides an easy-to-deploy, turnkey authentication solution that enables your organization to gain efficiencies and cost reductions. The Entrust IdentityGuard Virtual Appliance includes comprehensive software, modules, utilities and tools that help staff spend less time on IT management and more time focusing on revenue for their bottom-line.

“"It is a very powerful and easy-to-manage tool. We are able to customize and implementation is a breeze.""
- Rommel Luna, System Administrator, The Wawanesa Mutual Insurance Company

“"I have worked with Entrust Datacard and their products for over a decade. Entrust Datacard provides great products, great services, great consulting and is very responsive to client needs.""
- IT Professional, State & Local Government

“"I have used Entrust Datacard now in two different organizations and feel it offers good value for the money, as well as a very good range of options for second factor authentication.""
- System Administrator, Medium Enterprise Computer Software Company
# ENTRUST IDENTITYGUARD™ VIRTUAL APPLIANCE BENEFITS:

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<tr>
<th>Benefit</th>
<th>Description</th>
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<tr>
<td><strong>Strong Authentication</strong></td>
<td>Unlike solutions that appear attractive, yet underperform, our industry-leading authentication platform supports a broad range of use cases and next generation identities (such as mobile push authentication) which give you flexible authentication methods that grow with your business needs.</td>
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<td><strong>Easy to Deploy</strong></td>
<td>Provided as a turnkey solution, the Entrust IdentityGuard Virtual Appliance is a premier, two factor authentication solution that includes the operating system, database, and installation wizards that help ensure a simple installation that gets you up and running quickly. Our out-of-the-box support for redundancy and disaster recovery eliminates the need for IT to design and configure the system on their own – ultimately providing optimal distribution to the business and securing the Enterprise.</td>
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<td><strong>Easy to Manage</strong></td>
<td>User enrollment and management can be done with our Self Service Module, reducing the burden on IT and calls to the help desk for requests such as password resets.</td>
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<td><strong>Easy to Use</strong></td>
<td>With mobile push authentication, users can move away from outdated passwords and hardware tokens while retaining the ability to authenticate easily with a simple click of an “OK” button.</td>
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HOW ENTRUST IDENTITYGUARD™ VIRTUAL APPLIANCE WORKS

A Total Solution - SIMPLICITY AND SECURITY
Entrust Datacard offers a Virtual Appliance that simplifies the deployment of Entrust IdentityGuard in organizations of up to 20,000 users.

Entrust IdentityGuard Virtual Appliance Server
The Entrust IdentityGuard Server is the core of the Entrust IdentityGuard solution. It brings together policies for protecting your online resources (computers, Web sites, and applications) with users who need access to those resources.

The Entrust IdentityGuard Virtual Appliance Server starts with a hardened operating system, which means that non-essential software and utilities have been removed to reduce security vulnerabilities.

The Entrust IdentityGuard Virtual Appliance’s Web-based product and configuration management interface simplifies installation, repository configuration, backup and restore operations, updates, clustering, and disaster recovery.

The Entrust IdentityGuard Virtual Appliance installation offers:
- A wide range of user authentication options
- Active Directory synchronization to simplify user enrollment and management
- Optional integration with hardware security modules (HSM) for enhanced secure storage of master keys
- Integrations to support your existing systems

The Entrust IdentityGuard Virtual Appliance Server installer lets you create a cluster of Entrust IdentityGuard servers (primary, standby, and up to four replica servers) that provide redundancy and failover capability.

The Entrust IdentityGuard Virtual Appliance Server installation includes a single user database that offers redundancy through streaming replication.

Entrust IdentityGuard™ Virtual Appliance User Self-Service
The Self-Service Module is an optional component that provides value in many authentication and administration scenarios.

The Self-Service Module enables users to manage their authenticators at any time without the assistance of a help desk.

ENTRUST SOLUTION

VIRTUAL APPLIANCE

- Authentication Software
- Management Tools
- PostgreSQL Database
- High Assurance/ Disaster Recovery Utilities
- Red Hat Linux
- Hardened by Entrust
- Operating System

CUSTOMER PROVIDES

VIRTUALIZATION ENVIRONMENT

- Microsoft Hyper-V
- VMware vSphere
USE CASES

Cloud SSO (federation)
The move to the cloud and broad adoption of enterprise apps forces IT departments to view security outside traditional enterprise boundaries. Our authentication platform makes this transition easy to manage — and incredibly secure.

Mobile as the Computing Platform
Our Mobile Smart Credential capability acts as a virtual smart card that resides on mobile devices. There’s nothing for users to carry or insert. There’s just secure, seamless access.

VPN / Web Access
Our authentication platform allows your enterprise to ensure secure employee access to your networks and websites.

Windows Desktop Login
Bring strong two factor authentication to windows desktop login through mobile push authentication and fall back methods when users are offline.

Customer Portals
Meet the needs of your users and create more frictionless experiences that move beyond traditional passwords without compromising security.

Entrust IdentityGuard™ Virtual Appliance Specifications:

<table>
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<tr>
<th>Specifications</th>
<th>Details</th>
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<tbody>
<tr>
<td>Entrust IdentityGuard Server</td>
<td>Release 11.0 (patch 203998)</td>
</tr>
<tr>
<td>Entrust IdentityGuard Self-Service Module</td>
<td>Release 11.0 (patch 203961)</td>
</tr>
<tr>
<td>Operating System</td>
<td>Red Hat Enterprise Linux (RHEL) 6.7</td>
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<tr>
<td>Virtual Machine Requirements</td>
<td>1 CPU, 4GB memory</td>
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<tr>
<td>Database</td>
<td>PostgreSQL® 9.4.4</td>
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<td>Supported Virtualization applications</td>
<td>VMWare Workstation™, VMware vSphere ESXi , Microsoft® Hyper-V®</td>
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<td>Recommended max number of users</td>
<td>Entrust IdentityGuard: 20,000</td>
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<td>Smart Credential Authentication: 5,000 (due to increased storage requirements)</td>
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<td>Supported authentication methods</td>
<td>Biometric, External Grid Card, Token (hardware, software and mobile), Knowledge-based, Mutual, Password, Person Verification Number (PVN), OTP, Machine, Adaptive Authentication, Temporary PIN, Vasco and Camera tokens (limited regions)</td>
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