VMware Inc
Horizon Connector

RSA SecurID Ready Implementation Guide

Last Modified: May 22, 2013

Partner Information

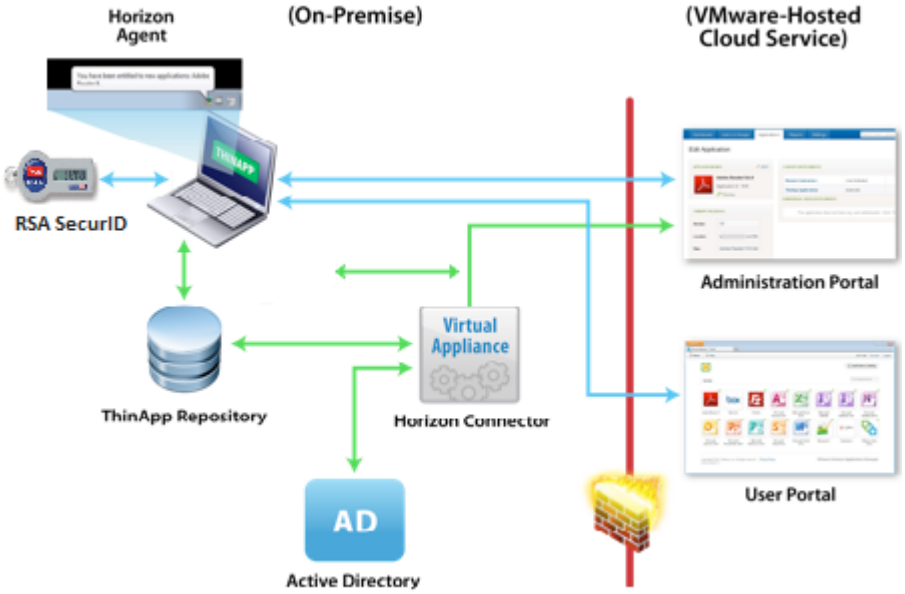
Product Information	
Partner Name	VMware
Web Site	www.vmware.com
Product Name	Horizon Connector
Version & Platform	1.5.1
Product Description	The Horizon Connector provides Federated Security on the client premise to VMware cloud hosted applications.

Solution Summary

VMware Horizon Connector uses RSA SecurID for two factor authentication into Horizon cloud based hosted applications.

The Horizon Connector logon page can optionally be customized to take advantage of RSA Risk-Based Authentication (RBA). RBA allows administrators to strengthen authentication attempts with step-authentication comprised of security questions or out-of-band tokencode delivery to an email address or SMS address. RSA Authentication Manager will challenge users when its adaptive risk engine determines the user is attempting a high-risk logon attempt.

RSA Authentication Manager supported features VMware Horizon Connector 1.5.1	
RSA SecurID Authentication via Native RSA SecurID Protocol	Yes
RSA SecurID Authentication via RADIUS Protocol	No
On-Demand Authentication via Native SecurID Protocol	Yes
On-Demand Authentication via RADIUS Protocol	No
Risk-Based Authentication	Yes
Risk-Based Authentication with Single Sign-On	Yes
RSA Authentication Manager Replica Support	Yes
Secondary RADIUS Server Support	No
RSA SecurID Software Token Automation	No
RSA SecurID SD800 Token Automation	No
RSA SecurID Protection of Administrative Interface	No



Authentication Agent Configuration

Authentication Agents are records in the RSA Authentication Manager database that contain information about the systems for which RSA SecurID authentication is provided. All RSA SecurID-enabled systems require corresponding Authentication Agents. Authentication Agents are managed using the RSA Security Console.

The following information is required to create an Authentication Agent:

- Hostname
- IP Addresses for network interfaces

Set the Agent Type to "Standard Agent" when adding the Authentication Agent. This setting is used by the RSA Authentication Manager to determine how communication with VMware Horizon Connector will occur.

Note: Hostnames within the RSA Authentication Manager / RSA SecurID Appliance must resolve to valid IP addresses on the local network.

Please refer to the appropriate RSA documentation for additional information about creating, modifying and managing Authentication Agents.

RSA SecurID files

RSA SecurID Authentication Files	
Files	**Location**
sdconf.rec	/opt/vmware/c2
Node Secret	/opt/vmware/c2
sdstatus.12	/opt/vmware/c2
sdopts.rec	/opt/vmware/c2

Note: The appendix of this document contains more detailed information regarding these files.

Risk-Based Authentication Integration Script

To protect a web-based application with Risk-Based Authentication (RBA), you must generate an integration script using the RSA Security Console, and deploy it to the applications default logon page. The script redirects the user from the web-based application's default logon page to a customized logon page that allows RSA Authentication Manager to authenticate the user with RBA.

The following steps should be taken prior to generating the integration script.

- Download the integration script template for VMware Horizon Connector from the following link: **https://sftp.rsa.com/human.aspx?Username=partner&password=rsasecured&arg01=903434085&arg12=downloaddirect&transaction=signon&quiet=true**
- Verify that the most recent RBA integration script template is installed on your Authentication Manager system by comparing the header of the installed integration script template to the header of the downloaded integration script template.
- Install the downloaded integration script template if it is newer than the installed script template, or if the script template for your agent is not installed.

Please refer to RSA documentation for more information on RBA integration scripts.

Partner Product Configuration

Before You Begin

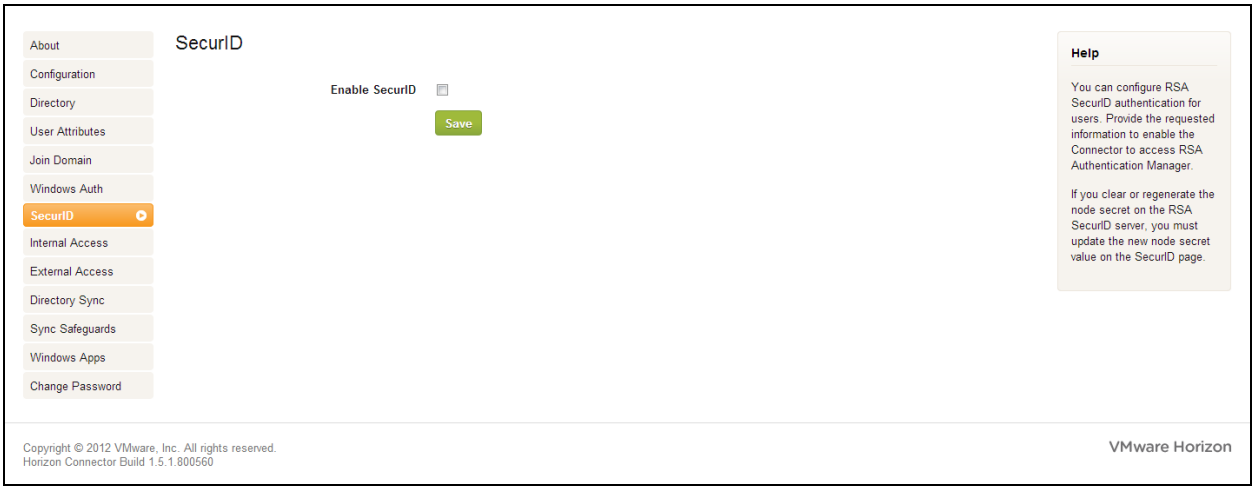
This section provides instructions for configuring the VMware Horizon Connector with RSA SecurID Authentication. This document is not intended to suggest optimum installations or configurations.

It is assumed that the reader has both working knowledge of all products involved, and the ability to perform the tasks outlined in this section. Administrators should have access to the product documentation for all products in order to install the required components.

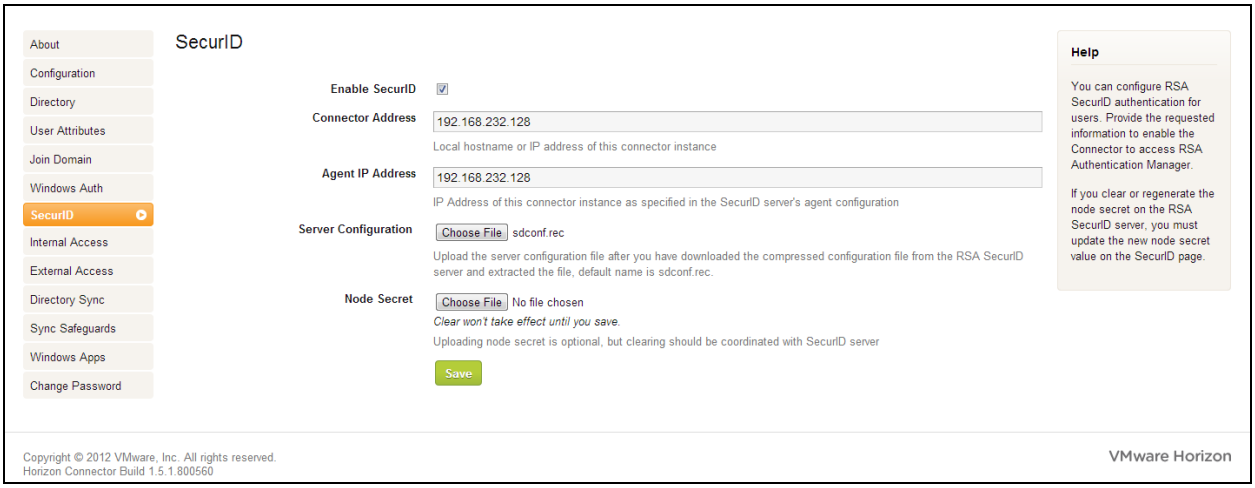
All VMware Horizon Connector components must be installed and working prior to the integration. Perform the necessary tests to confirm that this is true before proceeding.

Configuring SecurID for the Horizon Connector

1. Browse to **https://{HorizonConnectorIP}:8443** and login as the Horizon Connector Administrator and select **SecurID** from the toolbar.



2. Select the **Enable SecurID** checkbox and complete the remainder of the form by entering the **Connector Address, Agent IP Address** and the **Server Configuration** (sdconf.rec).



Customizing Connector login page for Risk-Based Authentication

> **Note: Horizon Connector must be configured for SecurID authentication in order to use RSA Risk-Based Authentication. Verify that this is true, and that SecurID Authentication works properly before continuing.**

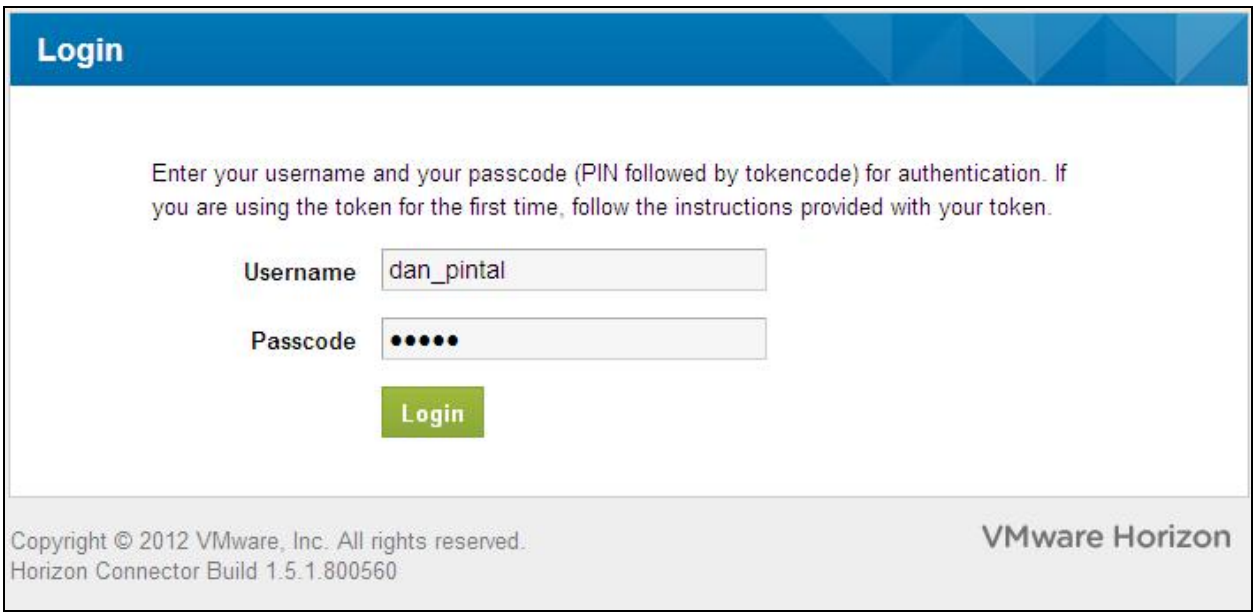
3. Download the RBA integration script for the Horizon Connector from the RSA Authentication Manager Security Console. Save this file as **am_integration.js**.
4. Enable SSH on the Horizon Connector if it is not already enabled.
5. Using an scp client, copy **am_integration.js** to **/opt/vmware/c2/c2instance/webapps/ROOT/static/js**.
6. Using an scp client, copy **/opt/vmware/c2/c2instance/webapps/ROOT/WEB-INF/views/jspf/login_end.jspf** to your local workstation so you can edit it. Make a backup of the original file by copying the file with a new name, such as **login_end.jspf.orig**.
7. Add the following two lines of code to the bottong of **login_end.jspf**, right before the closing body and html tags.

```
  <script type="text/javascript"
src="${contextPath}/static/js/am_integration.js"></script>
  <script>window.onload=redirectToIdP();</script>
  </body>
</html>
```

8. Copy the modified **login_end.jspf** to **opt/vmware/c2/c2instance/webapps/ROOT/WEB-INF/views/jspf**.
9. Restart the Horizon Connector appliance. Once the appliance restarts, users accessing the Horizon Connector login page will be redirected to the RSA Secure Logon Page, where they must successfully complete Risk-Based Authentication to be granted access.

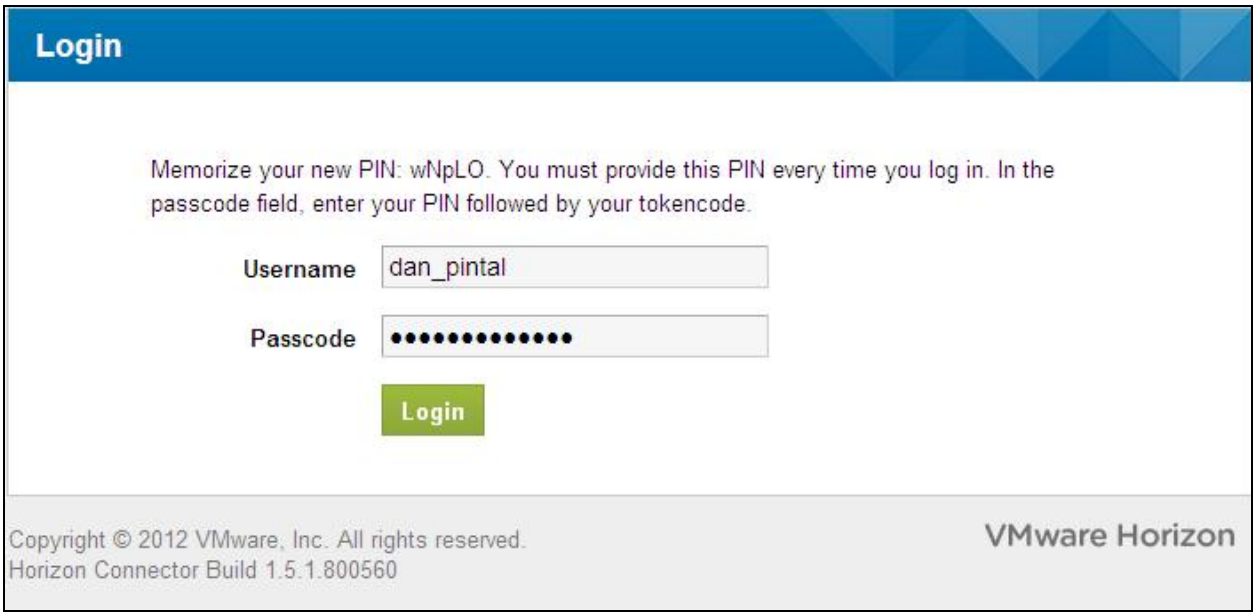
RSA SecurID Login Screens

Login screen:

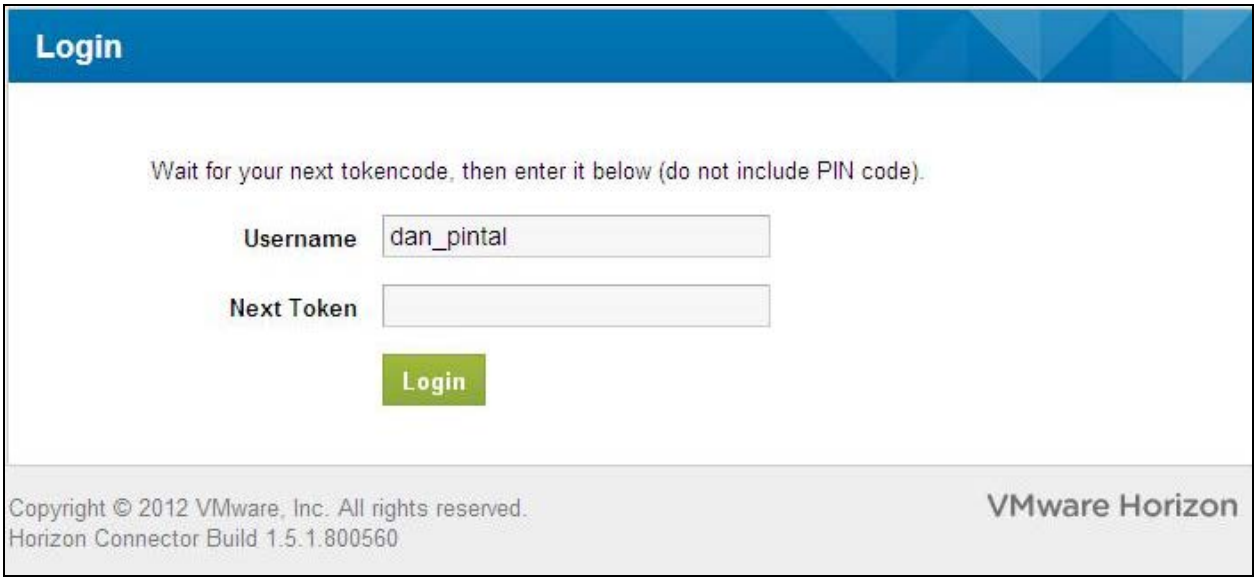


User-defined New PIN:

System-generated New PIN:



Next Tokencode:



Certification Checklist for RSA Authentication Manager

Date Tested: May 22, 2013

Certification Environment		
Product Name	**Version Information**	**Operating System**
RSA Authentication Manager	8.0	Virtual Appliance
VMware Horizon Connector	1.5.1	Suse Enterprise Linux 11

Mandatory Functionality			
RSA Native Protocol		**RADIUS Protocol**	
New PIN Mode			
Force Authentication After New PIN	✓	Force Authentication After New PIN	N/A
System Generated PIN	✓	System Generated PIN	N/A
User Defined (4-8 Alphanumeric)	✓	User Defined (4-8 Alphanumeric)	N/A
User Defined (5-7 Numeric)	✓	User Defined (5-7 Numeric)	N/A
Deny 4 and 8 Digit PIN	✓	Deny 4 and 8 Digit PIN	N/A
Deny Alphanumeric PIN	✓	Deny Alphanumeric PIN	N/A
Deny PIN Reuse	✓	Deny PIN Reuse	N/A
Passcode			
16-Digit Passcode	✓	16-Digit Passcode	N/A
4-Digit Fixed Passcode	✓	4-Digit Fixed Passcode	N/A
Next Tokencode Mode			
Next Tokencode Mode	✓	Next Tokencode Mode	N/A
On-Demand Authentication			
On-Demand Authentication	✓	On-Demand Authentication	N/A
On-Demand New PIN	✓	On-Demand New PIN	N/A
Load Balancing / Reliability Testing			
Failover (3-10 Replicas)	✓	Failover	N/A
No RSA Authentication Manager	✓	No RSA Authentication Manager	N/A

DRP

✓ = Pass ✗ = Fail N/A = Not Applicable to Integration

RSA Risk-Based Authentication Functionality			
RSA Native Protocol		**RADIUS Protocol**	
Risk-Based Authentication			
Risk-Based Authentication	✓	Risk-Based Authentication	N/A
Risk-Based Authentication with SSO	✓	Risk-Based Authentication with SSO	N/A

MRQ

✓ = Pass ✗ = Fail N/A = Not Applicable to Integration

Appendix

Partner Integration Details	
RSA SecurID API	Java API v8.1.1
RSA Authentication Agent Type	Standard Agent
RSA SecurID User Specification	Designated Users
Display RSA Server Info	No
Perform Test Authentication	No
Agent Tracing	Yes

API Details:

Node Secret:

It is recommended to clear the node secret through the Horizon Connector Administrator login page but can be deleted through the root login at the command line.

sdconf.rec:

Managed through the Horizon Connector administrative interface but can be deleted through the root login at the command line.

sdopts.rec:

Not accessible through the Horizon Connector administrative interface but can be modified and deleted through the root login at the command line.

sdstatus.12:

Not accessible through the Horizon Connector administrative interface but can be deleted through the root login at the command line.

Agent Tracing:

Authentication Agent Event Logging is written to /opt/vmware/c2/. The file rsa_api.log is created and used for informational event logging. When debug logging is enabled a second file rsa_api_debug.log is created.

To set the level of tracing, modify:

`/opt/vmware/c2/rsa_api.properties`

```
#      Enables debug tracing.
RSA_ENABLE_DEBUG=yes
#      Sends tracing to a file.
RSA_DEBUG_TO_FILE=yes
```