

# Novell Cloud Security Service

## Reducing Risk by Securing the Cloud

**Stefan Stiehl**  
**Senior Sales Technology Specialist**  
[sstiehl@novell.com](mailto:sstiehl@novell.com)

**Novell.**<sup>®</sup>



# – Disclaimer for Product in Development –

## **Unpublished Work of Novell, Inc. All Rights Reserved.**

This work is an unpublished work and contains confidential, proprietary, and trade secret information of Novell, Inc. Access to this work is restricted to Novell employees who have a need to know to perform tasks within the scope of their assignments. No part of this work may be practiced, performed, copied, distributed, revised, modified, translated, abridged, condensed, expanded, collected, or adapted without the prior written consent of Novell, Inc. Any use or exploitation of this work without authorization could subject the perpetrator to criminal and civil liability.

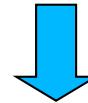
## **General Disclaimer**

This document is not to be construed as a promise by any participating company to develop, deliver, or market a product. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. Novell, Inc. makes no representations or warranties with respect to the contents of this document, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. The development, release, and timing of features or functionality described for Novell products remains at the sole discretion of Novell. Further, Novell, Inc. reserves the right to revise this document and to make changes to its content, at any time, without obligation to notify any person or entity of such revisions or changes. All Novell marks referenced in this presentation are trademarks or registered trademarks of Novell, Inc. in the United States and other countries. All third-party trademarks are the property of their respective owners.

# Pressures Facing Your Customers

## Security and Compliance

- Secure access to resources
- Track who did what when
- Simplify and control multiple username and passwords



## Cost Reduction Mandate

- Manage different web applications
- Reduce hardware and software costs
- Lower help desk costs



## Business Agility

- Add/remove applications
- Add/change/remove users
- Add/remove partners
- Integrate new businesses



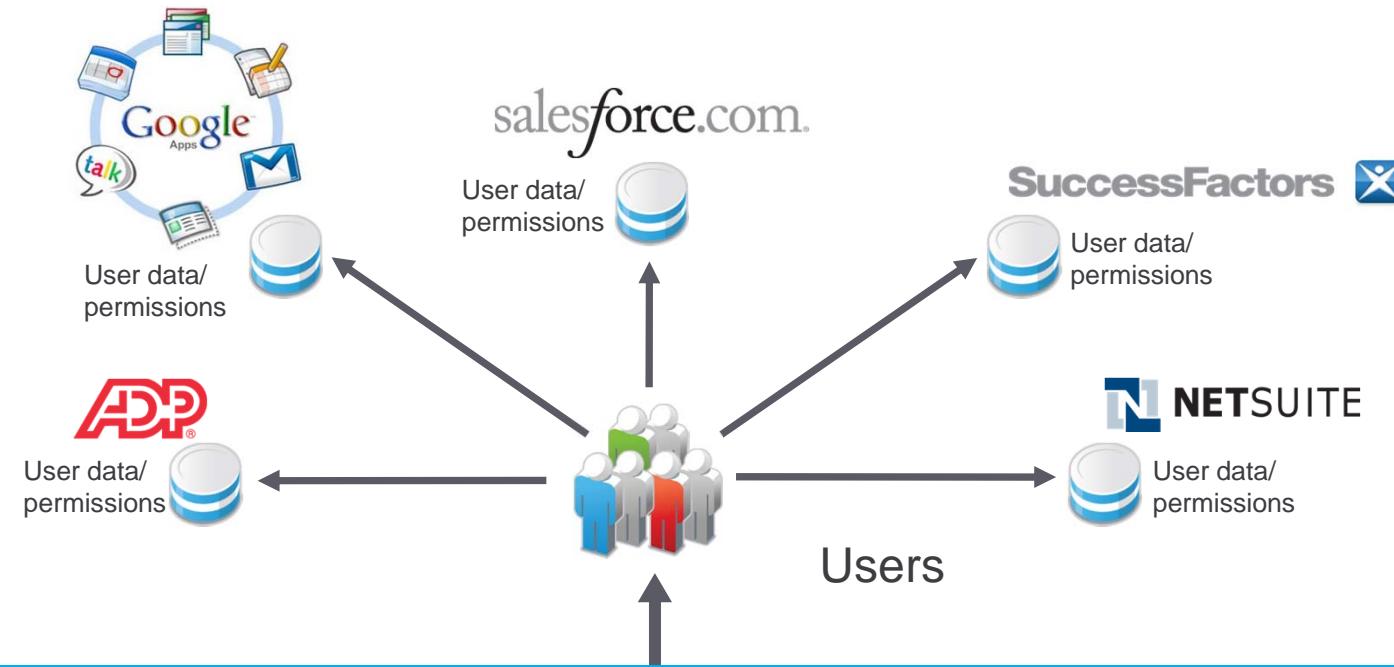
Many of these concerns can be solved using an identity and access management solution (IAM)



# What is Identity and Access Management (IAM)?

- IAM solutions address the fundamental problem of managing “**who has access to what**,”
- Benefits of IAM include –
  - **Single sign on (SSO)** to different internal and external applications
  - Manage changes to user **identities and access rights**
  - **Reduce password-related** calls to the help desk
  - Ensure that users have the **right access** to right resources
  - Manage **access for partners**, customers and other users outside the organization
  - Keeps **sensitive information** behind the firewall

# Creating IT Administration Nightmare

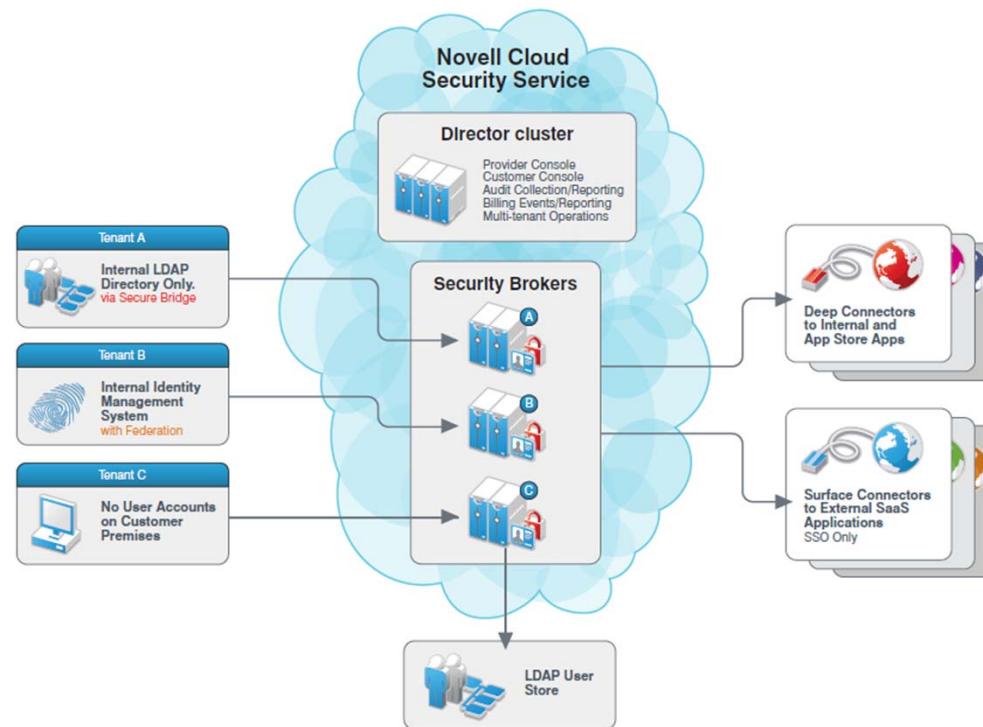


## Enterprise Challenge

- Multiple usernames/passwords
- Multiple identity silos
- Disparate administration tools
- Challenge in timely deprovisioning accounts of ex-employees

# Novell® Cloud Security Service

Novell Cloud Security Service is the only multi-tenant identity and access management solution that allows you to manage a multi-SaaS environment and also provide its customers with a secure gateway to SaaS applications.





# NCSS – Key Features

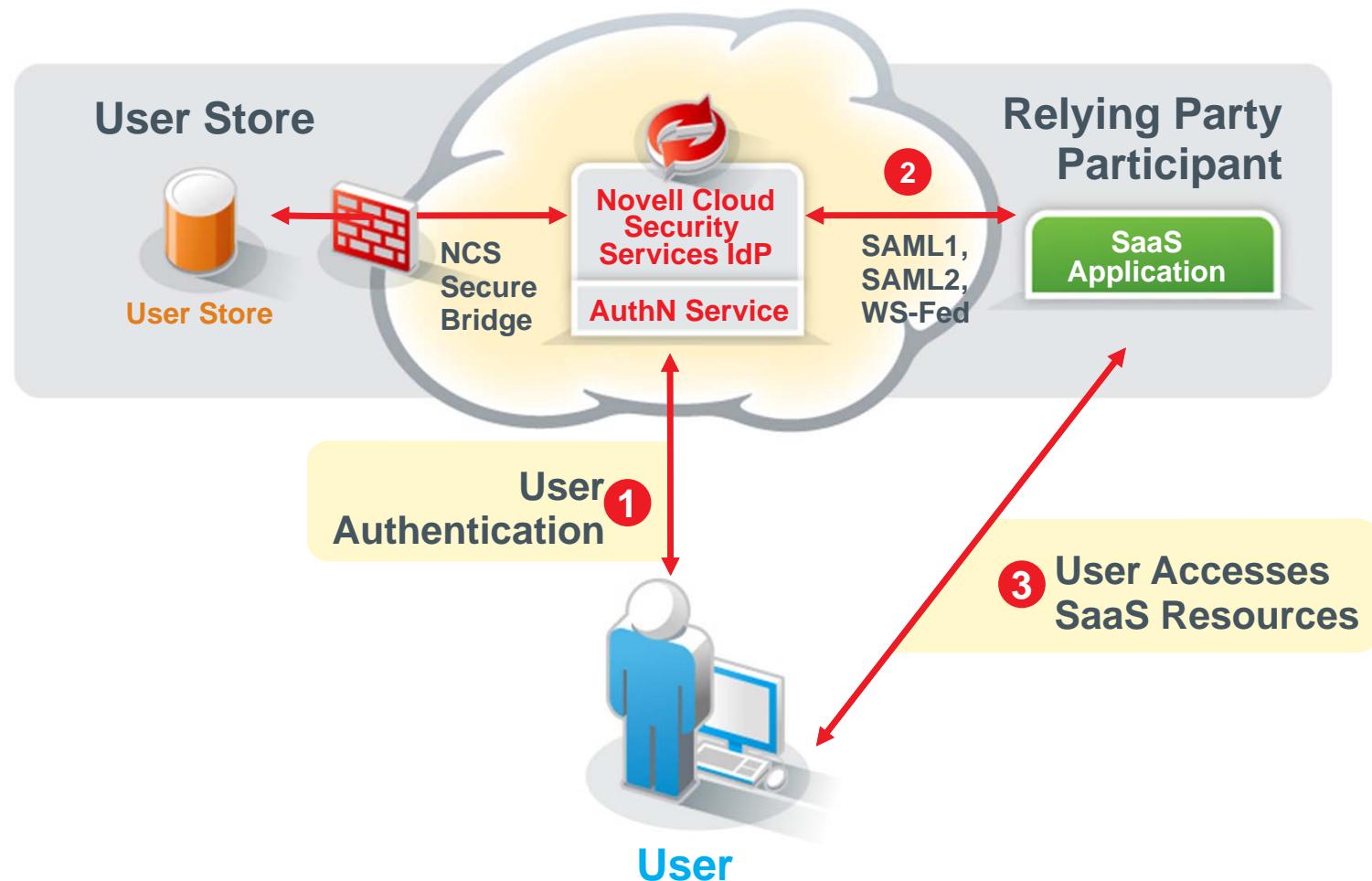
- Active security services for annexing cloud services into an enterprise, including
  - federated authentication and provisioning,
  - role mapping,
  - audit event routing,
  - workflow participation, and
  - secure locality based storage
- Connectors to
  - SaaS and PaaS providers
  - enterprise Identity systems
- Deployment, configuration and monitoring tools for service management of NCS by cloud providers
- Per-enterprise view and management of their use of SaaS and PaaS, and the connections to their internal systems



# Conceptional Use Cases

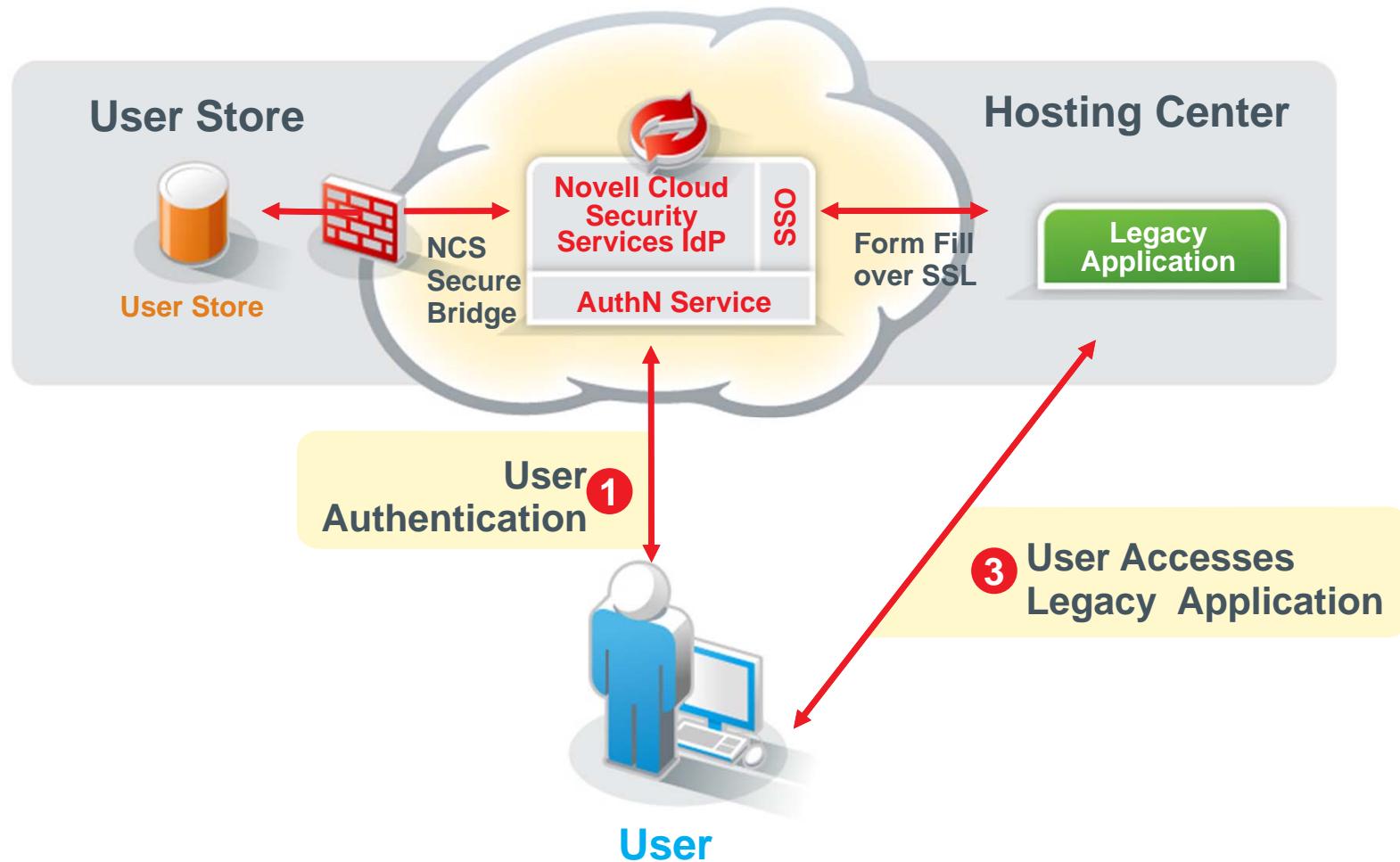
# IdP in Cloud using Secure Bridge

## Use Case “Secured Customer – to – Cloud”



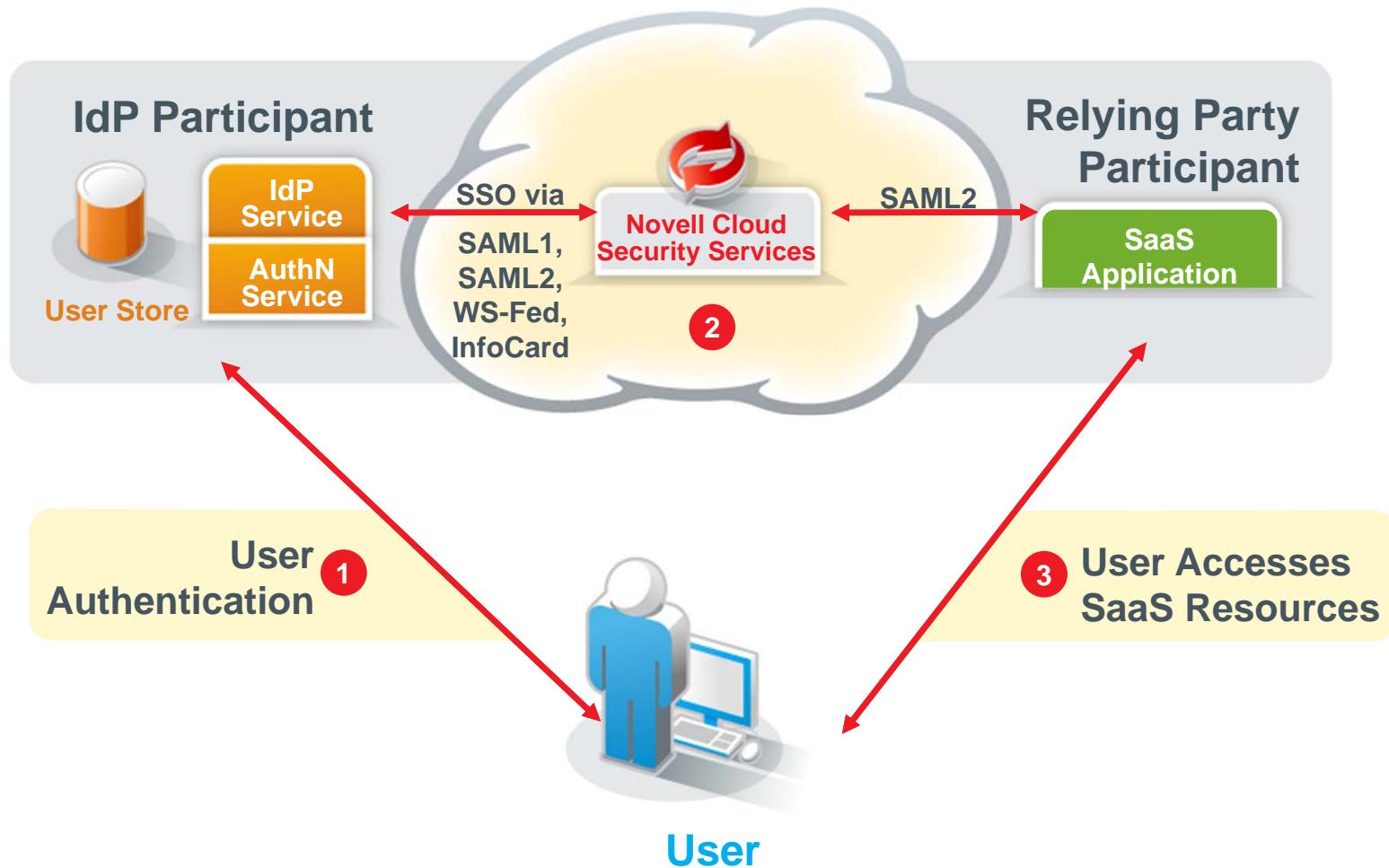
# IdP in Cloud using Secure Bridge

## Use Case “Secured Customer – to – Legacy System”



# Novell Cloud Security Services

## Use Case Customer – to – Cloud



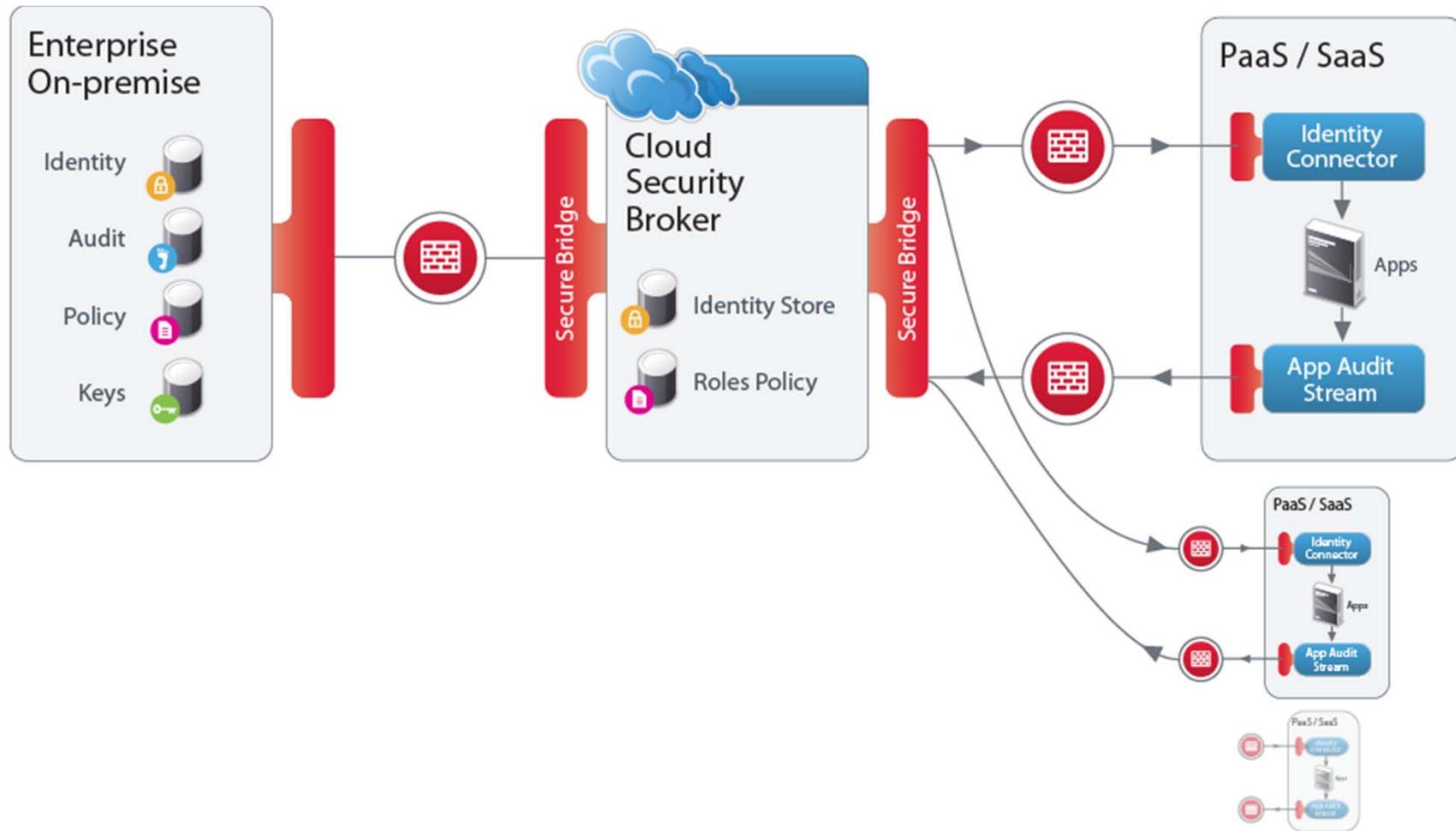
---

## Implementation Cases

44

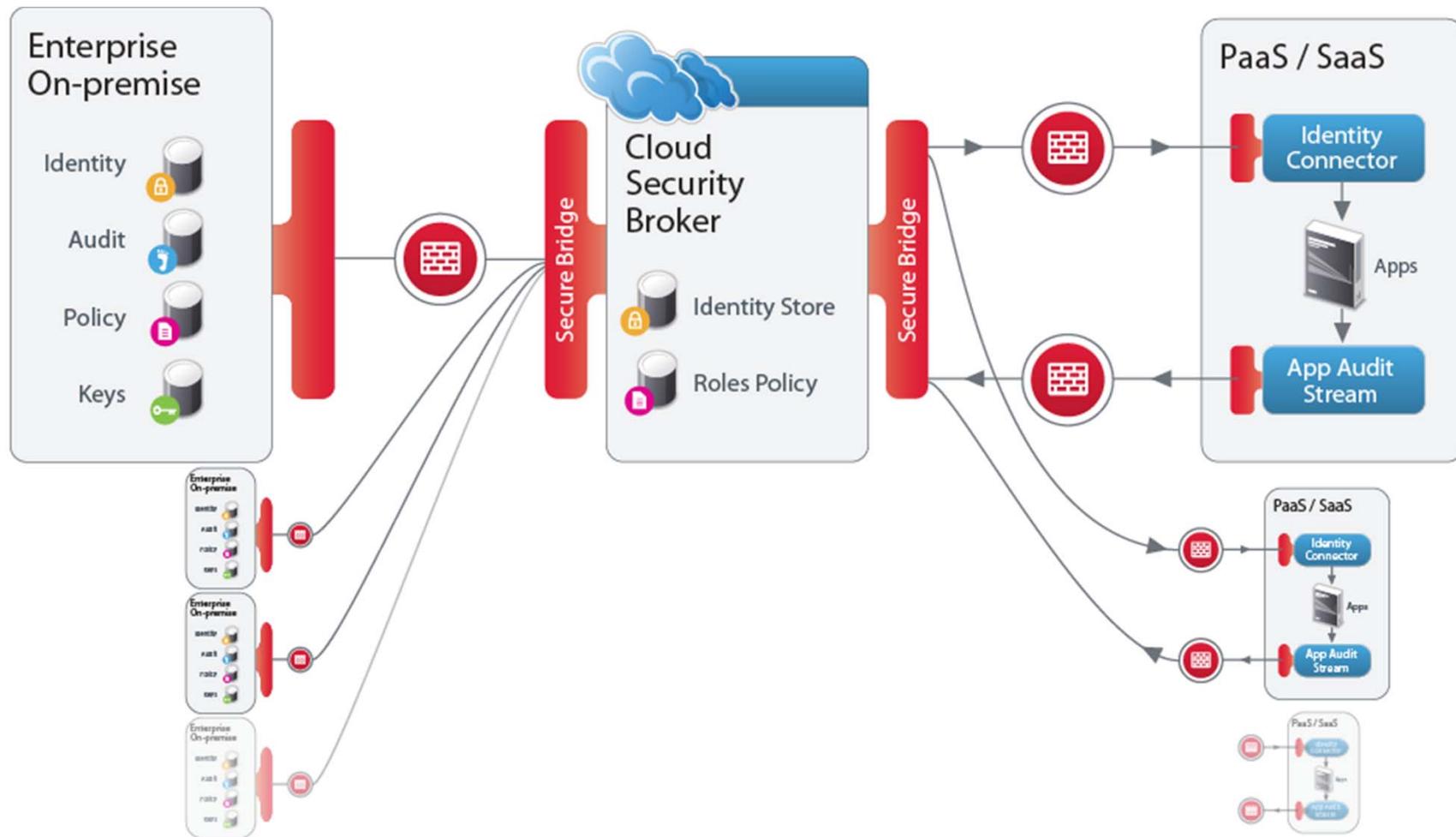
# Managed Service Provider View

## Single-Tenant Implementation Scenario



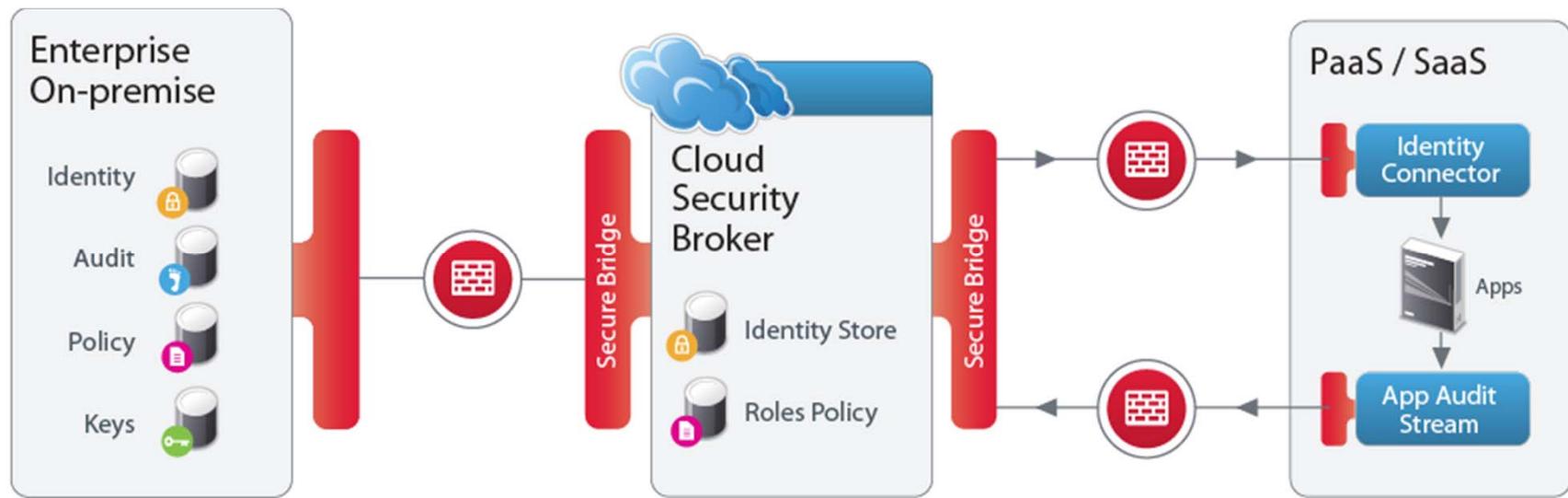
# Managed Service Provider View

## Multi-Tenant Implementation Scenario



# Enterprise Customer View

## Scoped Implementation Scenario

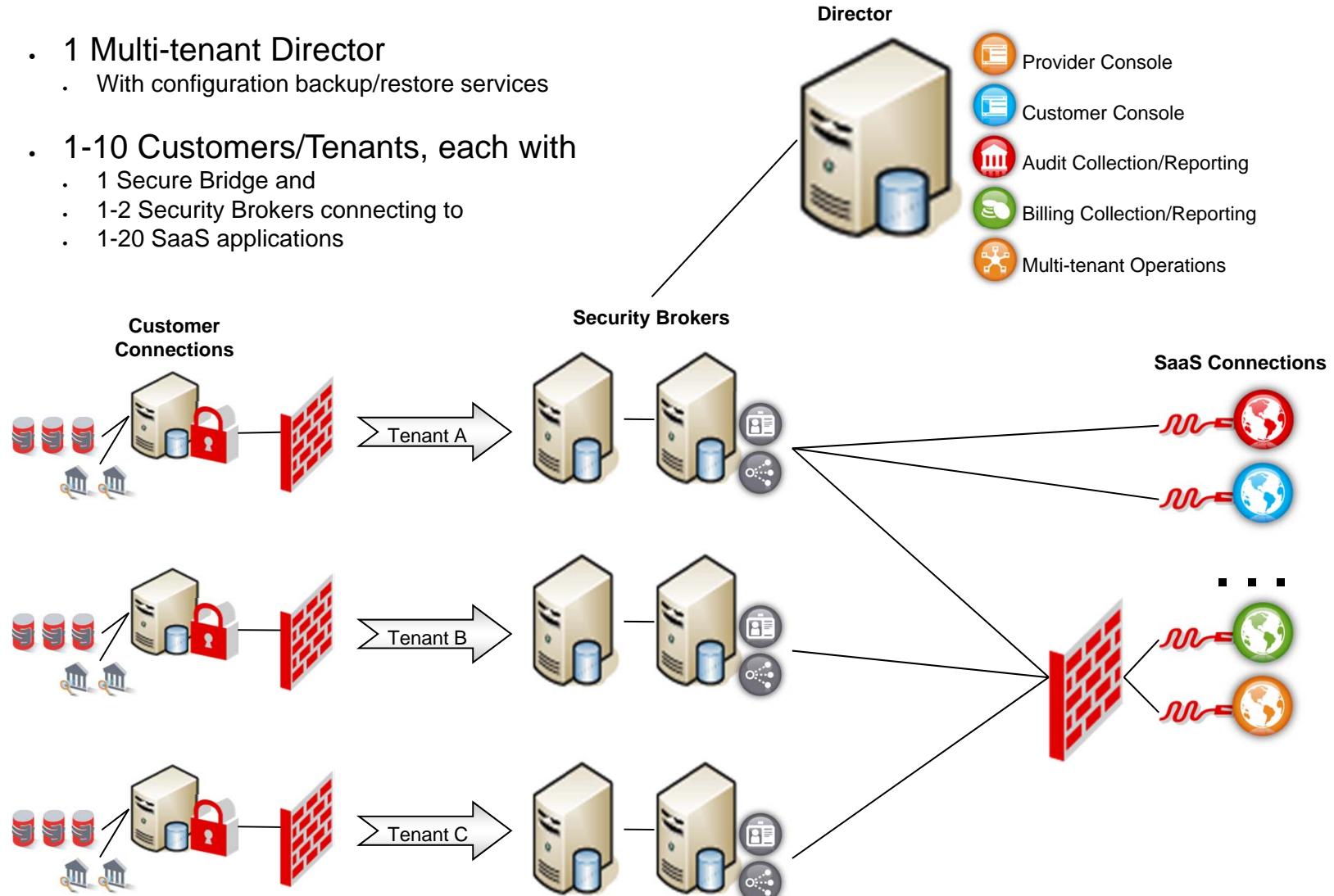




# Implementation Scenarios

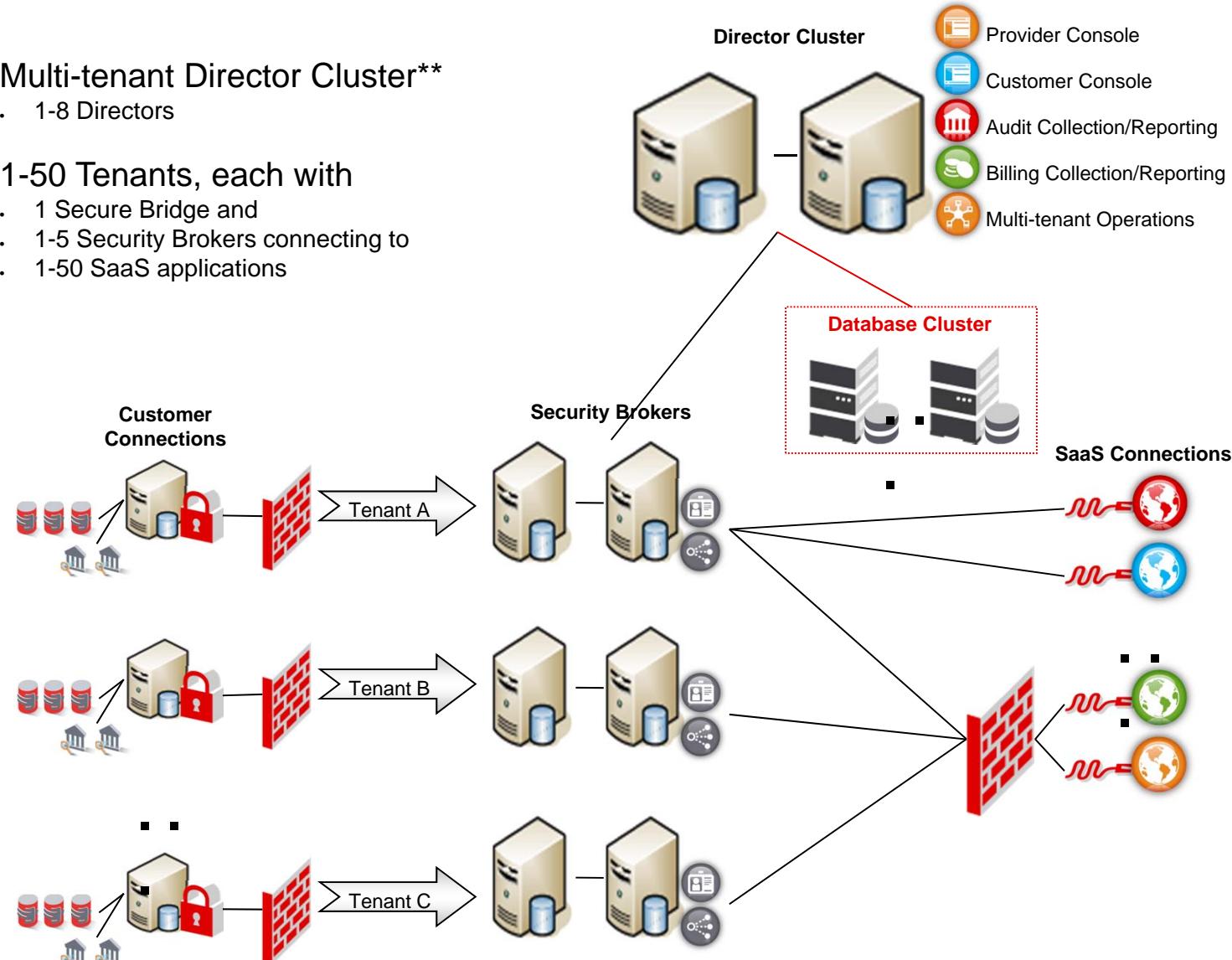
# NCSS Small Deployment

- 1 Multi-tenant Director
  - With configuration backup/restore services
- 1-10 Customers/Tenants, each with
  - 1 Secure Bridge and
  - 1-2 Security Brokers connecting to
  - 1-20 SaaS applications



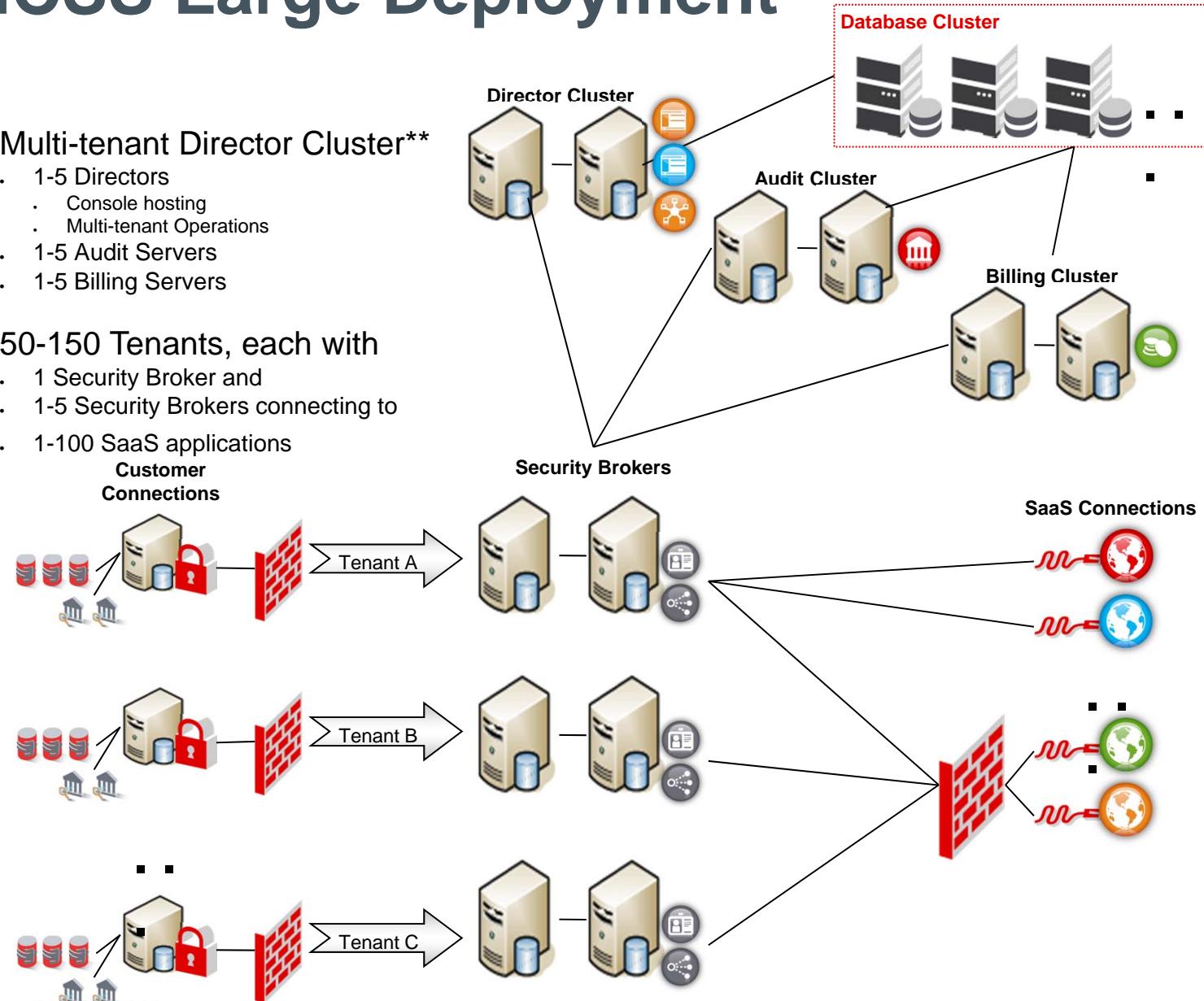
# NCSS Medium Deployment

- Multi-tenant Director Cluster\*\*
  - 1-8 Directors
  - 1-50 Tenants, each with
    - 1 Secure Bridge and
    - 1-5 Security Brokers connecting to
    - 1-50 SaaS applications



# NCSS Large Deployment

- Multi-tenant Director Cluster\*\*
  - 1-5 Directors
    - Console hosting
    - Multi-tenant Operations
  - 1-5 Audit Servers
  - 1-5 Billing Servers
- 50-150 Tenants, each with
  - 1 Security Broker and
  - 1-5 Security Brokers connecting to
  - 1-100 SaaS applications



---

# Interfaces to Cloud Security

44



# Novell Cloud Security Services

## Service Provider View – Configuring Director

The screenshot shows the Novell Cloud Security Service Provider - Home interface. At the top, there is a banner indicating "System setup incomplete". The main area is divided into several sections:

- Customers(0)**: Contains "Secure Bridge" (highlighted in yellow), "Identity Store", "Auditing Server", and "Contact Information".
- System Alerts**: Contains a "Recommended Action(1)" card titled "Configure Director" with the sub-instruction "Configure the IP Address of the Director". A cursor arrow points to this card.
- Connectors (0)**: Empty.
- Security Services**: Contains "Director" (highlighted in yellow) with status: 0 Operational, 0 Not Communicating, and 1 Not Configured. It also lists "Security Brokers".
- Reporting**: Contains "Cost Accounting", "Auditing", "Logging", and "Alerts".

At the bottom, there is a footer bar with icons for system status (0 errors, 0 critical, 0 warnings, 1 info) and the IP address "376.1.5.13".



# Novell Cloud Security Services

## Service Provider View – Configuring Director

The screenshot shows the Novell Cloud Security Service Provider - Security Services interface. The top navigation bar includes icons for Home, Cloud, Lock, Camera, and People, along with Admin and search functions. The main menu at the top left has tabs for Director and Security Brokers, with Director selected. The current view is the 'Settings' page for the Director, which displays the URL <https://director-77.amlab.net>. Below this, it shows the Load Balancer status as Internal. A message at the bottom left indicates 'System setup incomplete'. The bottom right corner shows the IP address 376.1.5.13 and a lock icon.

# Novell Cloud Security Services

## Service Provider View – Configuring Connectors

Provider - Home ⚠ System setup incomplete

Customers (0) New Customer

**Secure Bridge**



0 Operational  
0 Not Communicating  
0 No Initial Communicat  
0 Not Downloaded

**Identity Store**



0 Operational  
0 Not Communicating  
0 Not Configured

**Auditing Server**



0 Operational  
0 Not Communicating  
0 Not Configured

**Contact Information**

⚠ System setup incomplete

0 0 0 0

Done

System Alerts

**Recommended Actions (3)**

- 💡 **Add New Connector**  
Add a connector for Customers to access
- 💡 **Configure Another Director**  
Configure another director to backup the original

**Security Services**

💡 **Director** ✓



1 Operational  
0 Not Communicating  
0 Not Configured

**Security Brokers**

**New Connector**

Connector Customers

Name:

URL:

OK Cancel

Connectors (0) 💡 New Connector

Reporting

**Cost Accounting** ✓

**Auditing** ✓

**Logging**

**Alerts**

# Novell Cloud Security Services

## Service Provider View – Configuring Customers

Provider - Home System functional

**Customers(0)** New Customer

**Secure Bridge**

	0 Operational
	0 Not Communicating
	0 No Initial Communicat
	0 Not Downloaded

**Identity Store**

	0 Operational
	0 Not Communicating
	0 Not Configured

**Auditing Server**

	0 Operational
	0 Not Communicating
	0 Not Configured

**Contact Information**

**System Alerts**

**Recommended Actions (3)**

- 💡 Configure Another Director  
Configure another director to backup the original
- 💡 Change Branding  
Set the graphics and colors that Customers will see
- 💡 Add New Customer  
Add a connector for Customers to access

**Security Services**

💡 Director ✓

	1 <span style="color: green;">✓</span> Operational
	0 Not Communicating
	0 Not Configured

**Security Brokers** ✓

**Connectors (1)** New Connector

**PivotLink**

	✓ Operational
	0 Customers
	0 Operational
	0 Not Accessing
	0 Not Configured

**Reporting**

**Cost Accounting** ✓

**Auditing** ✓

**Logging**

**Alerts**

System functional 0 0 0 0 3

Done 376.1.5.13

# Novell Cloud Security Services

## Service Provider View – Cost Accounting

SaaS Co - Security Services

Cost Accounting   Auditing   Logging   Alerts

Settings   Edit

**Customer Defaults**

Billing Model: Unique Logins  
Period: Month  
Send Report: Automatically

**Billing Service**

URL: /None/  
Key: /None/

Billing Summary   Send Report

Dates: Last 30 Days   Begin: 30 July 2009   End: 29 August 2009

High Availability: 855 Security Brokers  
Load Balancers: 127  
Disk Space: 456 Gb  
Current Usage: 211 Gb  
Maximum: 223 Gb  
Daily Average: 219 Gb

Connector Logins

Connector	Unique	Total
MyCSS	599	645
PivotLink	641	1622
SalesForce	43	120
TOTAL	1282	2387

System functional   0 0 0 0 1

Done   376.1.5.13

# Novell Cloud Security Services

## Service Provider View – Cost Accounting

SaaS Co - Security Services

Cost Accounting Auditing Logging Alerts

Settings Save Changes Cancel

**Customer Defaults**

Billing Model: Unique Users  
Period: Month  
Send Report: Automatically

**Billing Service**

URL:   
Key: /None Generate Key

**Billing Summary**

Dates: Last 30 Days Begin: 30 July 2009  
End: 29 August 2009

High Availability: 855 Security Brokers  
Load Balancers: 127  
Disk Space: 456 Gb  
Current Usage: 211 Gb  
Maximum: 223 Gb  
Daily Average: 219 Gb

**Connector Logins**

Connector	Unique	Total
MyCSS	599	645
PivotLink	641	1622
SalesForce	43	120
TOTAL	1282	2387

System functional 0 0 0 0 1

Done 376.1.5.13



# Novell Cloud Security Services

## Service Provider View – Single Tenant Home Panel

SaaS-Co - Customers  Search Customers  New...  Duplicate  Delete  Enable  Disable  Add Customers to Connector

Name	Health	Status
Adobe Systems	<span>Green</span>	Functional
Boston Consulting Group	<span>Red</span>	Identity Store Not Configured
Cisco Systems	<span>Grey</span>	[Disabled]
Devon Energy	<span>Green</span>	Functional
Edward Jones	<span>Green</span>	Functional
Genentech	<span>Yellow</span>	Security Broker Unresponsive
Goldman Sachs	<span>Green</span>	Functional
Google	<span>Red</span>	Auditing Server Not Configured
Methodist Hospital System	<span>Red</span>	Identity Store Not Configured
NetApp	<span>Green</span>	Functional
Nugget Market	<span>Green</span>	Functional
Recreational Equipment (REI)	<span>Red</span>	Secure Bridge Not Downloaded
Robert W. Baird	<span>Green</span>	Functional

Page 1 of 1 | Rows: 15 | Displaying 1 - 13 of 13

System Functional  0  0  0  0  1

**Connectors**

- Google App**
- PivotLink**
- PetClinic**  Add

Not Added to Customer



# Novell Cloud Security Services

## Service Provider View – Single Tenant Billing

The screenshot shows the Novell Cloud Security Services interface for a single tenant, Boston Consulting Group. The top navigation bar includes 'SaasCo - Customers' and various management icons: Search Customers, New..., Duplicate, Delete, Enable, Disable, and Add Customers to Connector.

The main area displays the 'Boston Consulting Group - Home' dashboard. It features a green header with the service name and icons for Home, Grid, Lock, and Power. A status indicator shows 'System functional'.

The dashboard includes tabs for Authentication, Security Brokers, Billing (selected), and Reporting.

**Billing Settings:**

- Customer Defaults:** Billing Model: Unique Logins, Period: Month, Send Report: Automatically.
- Billing Service:** URL: /None, Key: /None.

**Billing Summary:**

- Dates: Recent Activity (Begin: 23 August 2009, End: 29 August 2009).
- High Availability: 3 Security Brokers.
- Load Balancers: On.
- Disk Space: 2.0 Gb Maximum: 1.68 Gb.
- Current Usage: 1.68 Gb Daily Average: 1.53 Gb.

**Connector Logins:**

Connector	Unique	Total
Google Apps	59	64
PivotLink	1	2

At the bottom, there are system status indicators: System Functional, 0 errors, 0 warnings, 0 alerts, and 1 notifications.



# Novell Cloud Security Services

## Customer View – Home Panel

SaaSCo ©  
Cloud Security

NetApp - Home ⚠ System setup incomplete

Customer Admin

**Customer**

- Secure Bridge 💡 ✖ Not Downloaded
- Identity Store ✖ Not Configured
- Auditing Server

**System Alerts (0)**

**Recommended Actions (1)**

- Download Secure Bridge  
Download the Secure Bridge component

**Connectors**

- PivotLink ✖ Not Configured
- PetClinic ✖ Not Configured

System functional 0 0 0 0 1

Done 376.1.5.13

# Making IT Work As One™



### **Unpublished Work of Novell, Inc. All Rights Reserved.**

This work is an unpublished work and contains confidential, proprietary, and trade secret information of Novell, Inc. Access to this work is restricted to Novell employees who have a need to know to perform tasks within the scope of their assignments. No part of this work may be practiced, performed, copied, distributed, revised, modified, translated, abridged, condensed, expanded, collected, or adapted without the prior written consent of Novell, Inc. Any use or exploitation of this work without authorization could subject the perpetrator to criminal and civil liability.

### **General Disclaimer**

This document is not to be construed as a promise by any participating company to develop, deliver, or market a product. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. Novell, Inc. makes no representations or warranties with respect to the contents of this document, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. The development, release, and timing of features or functionality described for Novell products remains at the sole discretion of Novell. Further, Novell, Inc. reserves the right to revise this document and to make changes to its content, at any time, without obligation to notify any person or entity of such revisions or changes. All Novell marks referenced in this presentation are trademarks or registered trademarks of Novell, Inc. in the United States and other countries. All third-party trademarks are the property of their respective owners.

