

For Citrix R&D

Datasource onboarding for Analytics

My Role

Sr.Product designer

Team

4 product manager
4 Engineer managers
3 Lead software architect
6 Developers

Project Scope

Designed & developed

Project success

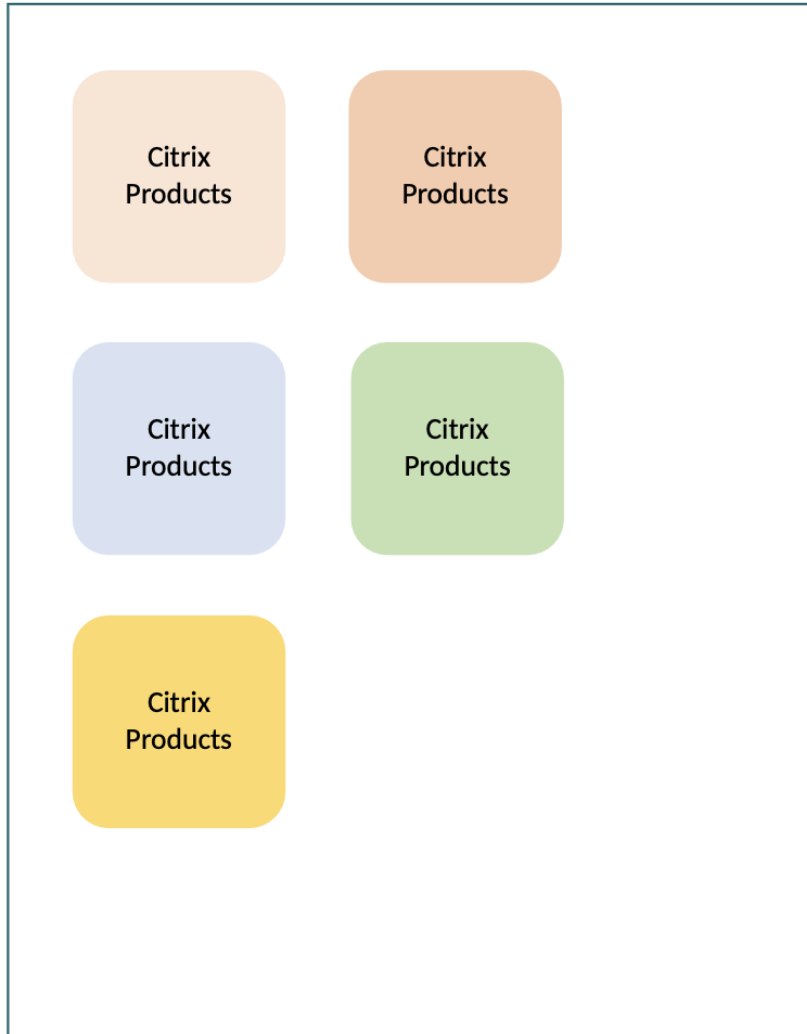
Developed and deployed on General availability (GA)

Positive Customer feedback from Top 100 customers

The Premise

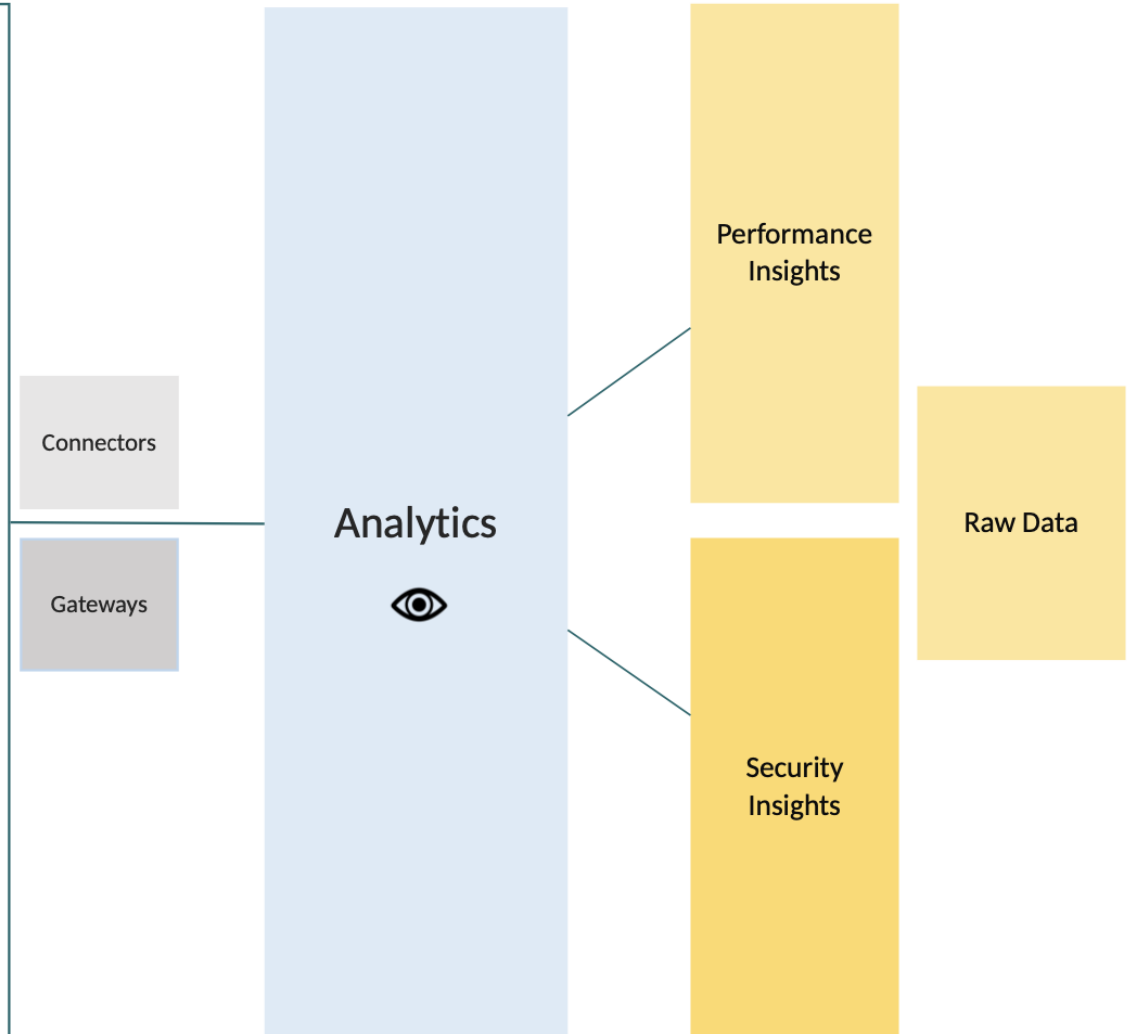
TYPE:

Datasources



USED BY : End Users of Customer/ Employees from Customer enterprise

Analytics

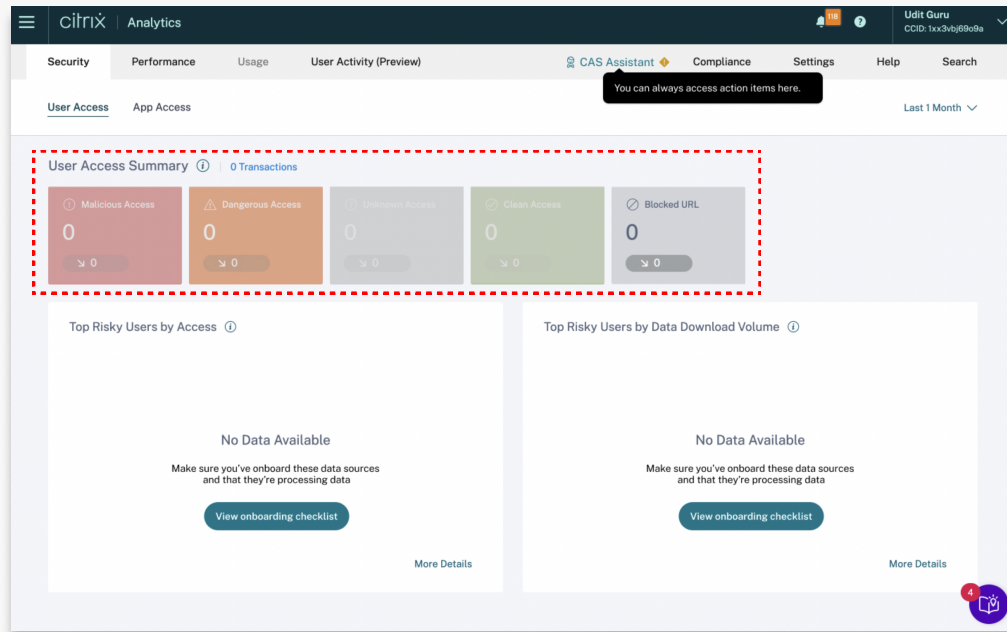


Citrix Admin/ Customer

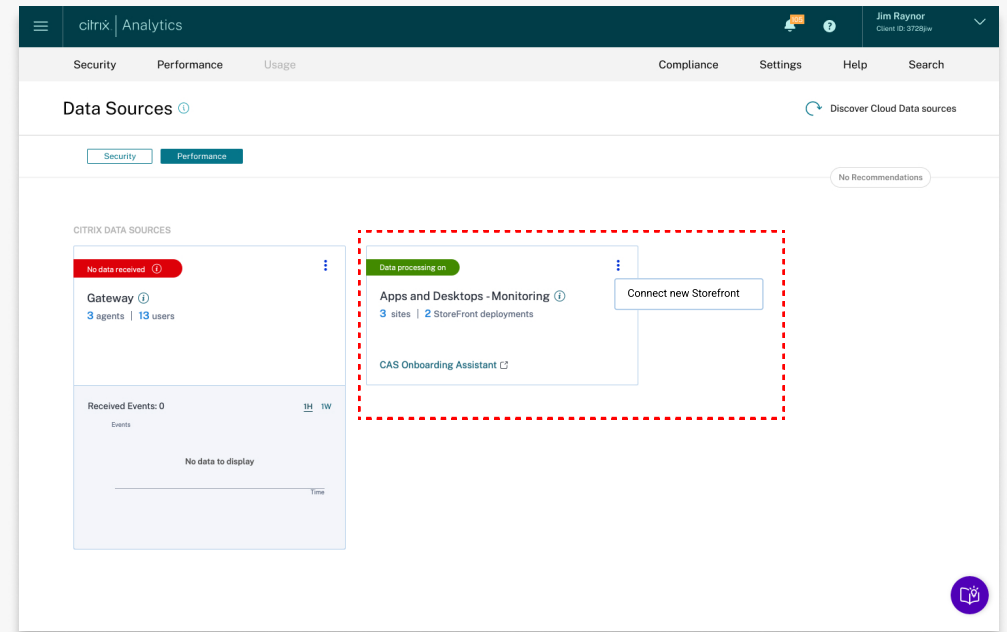
Insights

Citrix Admin/ Customers

Empty Dashboard when the customer sign-in without onboarding Datasources



No Guidance to onboard Datasources



Problem Narration



CUSTOMER PAIN POINTS

1.
Lack of awareness
Why to onboard
Datasources ?

What value to
expect ?

2.
Lack of Priority:
Don't know which
data source to
onboard first ?

No means to
Identify Value

3.
What should be
the priority of
onboarding ?
(On-prem first)

4.
No indication /
confirmation once
prerequisites are
filled / datasources
are onboarded

5.
"Not available (NA)"
appears on the
Dashboard/self service

Failure to detect
events, even after
full on-boarding

6.
If I want X information
about my users ,
what should I do ?

What to do after
onboarding
dataSources ?

EXPERIENCE OUTCOMES

A w a r e n e s s

Awareness about data sources and
their value ads, prerequisites.

F a m i l i a r i t y

familiarize the course of action
and processes.

G u i d a n c e

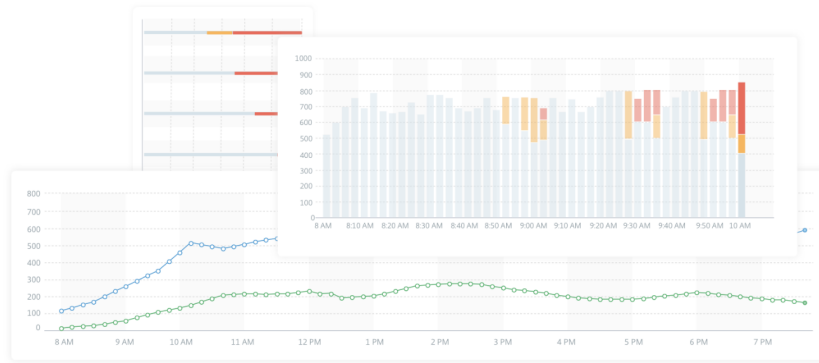
Impact of onboarding actions and their
outcomes.

No Guidance to onboard Datasources

Old design for onboarding

Welcome to Citrix Analytics for Performance!

Analyze the performance of your Citrix Virtual Apps and Desktops environments on-prem and on cloud.



Cloud services - Your Citrix Virtual Apps and Desktops and Citrix Gateway services on Citrix Cloud are automatically detected.

On-prem sites - Manually configure the on-prem Citrix Virtual Apps and Desktops and Citrix Gateway for your Site(s).

Dashboards will be populated in approximately an hour from data source detection.

Get Started

(Score: 71-100) (Score: 41-70) (Score: 1-40)

New design for onboarding

The new design for onboarding Citrix Analytics for Security features a clean, modern interface. At the top, it says "Welcome to Citrix Analytics for Security" with the tagline "Proactively detect and prevent insider threats with user behavior analytics." Below this, there are five main action items, each with an icon and a brief description:

- Analyse risky users for potential threats
- Create custom risk indicators and reports
- Monitor global accesses with geofences
- Automate actions for proactive mitigation
- Export insights into your SIEM

A "Get Started" button is located at the bottom right of the main content area. The interface also includes a navigation menu on the left, a user profile in the top right, and footer links for "Learn more about Citrix Analytics" and "Support".

Primary Persona



Citrix admin

Mike potronoy | Boston dynamics | Age - 36 yrs | 10 yrs experience

ABOUT

The Citrix admins from the customer side, who are the first person to login into Citrix analytics and configure. They have wider access to Citrix knowledge base and networks, role access which makes them worthy of configuring the Analytics tool.

GOALS

1. Get the product ready for use, so that other team members can use the product.
2. Smooth Integrations with external tools like Splunk or Azure Sentinel.

CHALLENGES

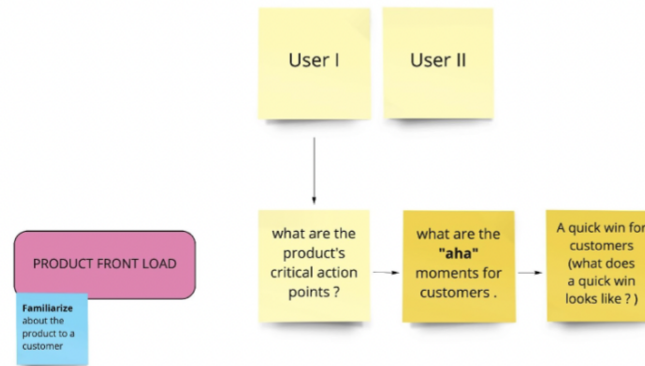
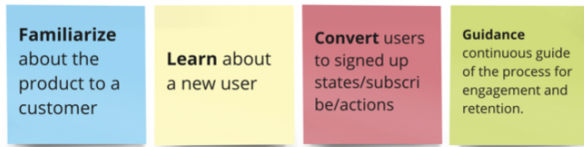
1. Having a large user base makes it critical for integration, how do we now integrate?
2. how do we know even if the customers has onboarded? has data sources?
3. When there is nothing to onboard, "what to do? No guidance"

PAIN POINTS

1. Not all admins are aware of product value.
1. Admins work in time bound capacity, some outcomes may not be achieved.
1. Some activities are prone to dismissal.
Eg. Long ON-boarding journey
1. No proper guidance when using the product for the first time

" I want to get the product up and running, so that other team members can use it efficiently "

Design Strategy



" POV: When customer opens analytics for the first time, finishes one set of onboarding journey "



For us, completion of Storefront Onboarding would be the "Aha" moment, since 75% of our customers uses Storefront

Design onboarding guidance framework

1. SET THE RIGHT **DEFAULT**
2. **INLINE GUIDANCE**
3. **REACTIVE GUIDANCE**
In response to user actions. Provide a way to inform new users, without interrupting who already were familiar
4. **PROACTIVE GUIDANCE**
5. **ON-DEMAND GUIDANCE**
Centralised resource

FAMILIARIZE

citrix Analytics

Udit Guru
CCID: dcintace574c

Welcome to Citrix Analytics for Security

Proactively detect and prevent insider threats with user behavior analytics.

- Analyse risky users for potential threats
- Create custom risk indicators and reports
- Monitor global accesses with geofences
- Automate actions for proactive mitigation
- Export insights into your SIEM

Get Started

Learn more about Citrix Analytics

Support


LEARN

citrix Analytics Udit Guru CID: dcintace574c

Let's Get Started!

You can use Citrix Analytics for Security to monitor both on-premises deployments and cloud services.

[Learn more](#)



Cloud services

To accelerate your experience, data processing will be automatically enabled for services managed on Citrix Cloud.

- DaaS
- Content collaboration
- Secure private access
- Secure browser
- Identity provider

On-premise deployments

To receive user events and populate insights, you must manually onboard your on-premises deployments from the data sources catalog.

- Virtual Apps and Desktops
 - StoreFront
 - Director
 - Session Recording
- Gateway

Understood! Take me to the Data-sources. [Proceed](#)

[Learn more about Citrix Analytics](#) [Support](#)

Phase 1 Solution Prioritization List

The Aha Moment
Storefront onboarding
set as a top priority,
75% of our customers
uses storefront.

Proactive Guidance

The screenshot displays the Citrix Analytics interface. At the top, there is a navigation bar with 'citrix | Analytics' on the left and user information 'Jim Raynor' (Client ID: 3728jw) on the right. Below this is a secondary navigation bar with tabs for 'Security', 'Performance', 'Usage', 'Compliance', 'Settings', 'Help', and 'Search'. The main content area is titled 'Data Sources' and includes a 'Discover Cloud Data sources' button. There are two filter tabs: 'Security' and 'Performance'. A 'Hide Recommendations' button is visible in the top right of the main content area. The 'Recommendations' section is highlighted with a red '4' and contains the following items:

- Enable Workspace App Data Collection**
 - Monitor Endpoint Telemetry**: Endpoint related data such as Location, ISP, Wifi Signal Strength, Throughput etc., helps in better triaging of issues related to poor in-session experience. Onboard Storefront to enable endpoints to send data to Analytics. [Know more](#)
 - Onboard StoreFront deployment to Analytics**: Onboarding StoreFront enables the Workspace App to send endpoint telemetry to Analytics so you can gain endpoint visibility. [Begin onboarding](#)
 - Don't own any StoreFront deployments currently? [Dismiss](#)
- Onboard Director** [Monitor On-premise Infrastructure](#)
- Onboard Gateway** [Get Network Insights](#)

At the bottom, there is a section for 'CITRIX DATA SOURCES' with two cards: 'Gateway' (No data received) and 'Apps and Desktops - Monitoring' (Data processing on).

citrix Analytics Jim Raynor Client ID: 3728jw

Security Performance Usage Compliance Settings Help Search

Data Sources Discover Cloud Data sources

Security Performance

Recommendations 4

Enable Workspace App

Monitor user activity
Get visibility into user activity across sessions. [Know more](#)

Onboard StoreFront
Onboarding StoreFront instances

[Begin onboarding](#) Don't own any StoreFront deployments currently? [Dismiss](#)

Onboard Director [Monitor On-premise Infrastructure](#)

Onboard Gateway [Get Network Insights](#)

Specify Deployed StoreFront Instances

Specifying your StoreFront instances helps Analytics successfully onboard you and ensure proper data ingestion. You can modify this value at any time.

Total number of deployed StoreFront instances

i The total number of StoreFront deployments encompasses both standalone StoreFront servers and StoreFront server groups. For example, if your infrastructure has 3 individual server deployments and 2 server group deployments, your total StoreFront deployments would be 5.

[Continue](#)

citrix Analytics Jim Raynor Client ID: 3728jw

Security Performance Usage Compliance Settings Help Search

Data Sources Discover Cloud Data sources

Security Performance Hide Recommendations

Recommendations 4

Complete StoreFront Onboarding

Monitor user access and activity
 Get visibility into users' access behaviours and risks with details on endpoints such as location, IP address, Workspace app versions, etc. across sessions. Understand application launches and activities within sessions.
[Know more](#)

StoreFront Deployments
 Total StoreFront deployments includes individual StoreFront servers and StoreFront server groups.

Deployed in infrastructure	Onboarded to Analytics
5 Edit count	0 5 Remaining

Ensure the following:

- Deployed StoreFront instances are specified correctly
- Steps to configure StoreFront are followed for all individual StoreFront deployments and server-group deployment
- **Publish-STFServerGroupConfiguration** is run to propagate your configuration changes to the server group so that the other servers in the deployment are updated

[View onboarding steps](#)

Onboard Director [Monitor On-premise Infrastructure](#)

Onboard Gateway [Get Network Insights](#)

Onboard Session Recording Server [Gain In-Session Visibility](#)

CITRIX DATA SOURCES

No data received i	No data received i	No data received i
Secure Private Access	Content Collaboration	Endpoint Management

On-call Guidance



System Status Visibility

The screenshot displays the Citrix Analytics dashboard. At the top, there are navigation tabs for Security, Performance, and Usage. Below this is the 'Data Sources' section with tabs for Security and Performance. A 'Recommendations' section is highlighted with a red badge showing 4 items. The main recommendation is 'Review Onboarded StoreFront Instances', which includes a sub-section 'Monitor user access and activity' with a 'Know more' button. Below this, there are 'StoreFront Deployments' statistics: 5 deployed in infrastructure and 5 onboarded to Analytics (All Onboarded). A blue information box states that all specified StoreFront deployments are onboarded. At the bottom, there are three data source cards: 'Secure Private Access', 'Content Collaboration', and 'Endpoint Management', all showing 'No data received'.

Enhanced Visibility for Security Analytics

Events received from StoreFront can help mitigate user risks and perform threat-hunting.

Monitor user behaviours using data including:

- Location - City, Country
- Network - IP addresses, Proxy type, VPN service name
- Endpoints - Device ID, OS name, Browser name, Workspace App versions
- Data exfiltration - Download, Print, Clipboard, URL navigate events among others

CITRIX DATA SOURCES

Source Name	Status	Users	Devices
Secure Private Access	No data received ⓘ		
Content Collaboration	No data received ⓘ	25 users	
Endpoint Management	No data received ⓘ	4 users	6 devices

Regular Guidance for second Priority Datasources

The screenshot displays the Citrix Analytics interface. At the top, the navigation bar includes 'Security', 'Performance', 'Usage', 'Compliance', 'Settings', 'Help', and 'Search'. The user 'Jim Raynor' is logged in. A notification banner states 'Recommendation was marked as complete.' Below this, the 'Data Sources' section is active, with tabs for 'Security' and 'Performance'. A 'Recommendations' section shows three items: 'Onboard Director' (Monitor On-premise Infrastructure), 'Review Onboarded Gateways' (Count not specified), and 'Onboard Session Recording Server' (Gain In-Session Visibility). The bottom section, 'CITRIX DATA SOURCES', features three cards: 'Secure Private Access', 'Content Collaboration' (25 users), and 'Endpoint Management' (4 users | 6 devices). Each card shows 'Received Events: 0' and a 'No data received' status.

citrix Analytics

Jim Raynor
Client ID: 3728jw

Security Performance Usage Compliance Settings Help Search

Data Sources ⓘ

Recommendation was marked as complete.

Discover Cloud Data sources

Security Performance

Hide Recommendations X

Recommendations 3

- Onboard Director Monitor On-premise Infrastructure
- Review Onboarded Gateways ⓘ Count not specified
- Onboard Session Recording Server Gain In-Session Visibility

CITRIX DATA SOURCES

Source Name	Users/Devices	Received Events
Secure Private Access	-	0
Content Collaboration	25 users	0
Endpoint Management	4 users 6 devices	0

Next Step

Data processing on

Apps and Desktops **Connect new Storefront**

3 sites | 2 StoreFront deployments

CAS Onboarding Assistant

citrix | Analytics

Security Performance Usage

Virtual Apps and Desktops - Monitoring

StoreFront deployments

+ Connect to StoreFront deployment

Why should you deploy StoreFront ?

What are data sources ? why should I onboard data sources ? The dashboard will be empty unless you install the storefront from the datasources.It is essential to onboard data to enable the Analytics to run and provide data on the dashboard. Once you onboard datasource, it will require 1 Hour to populate the dashboard with information.

Discovered Sites

cloudxsite

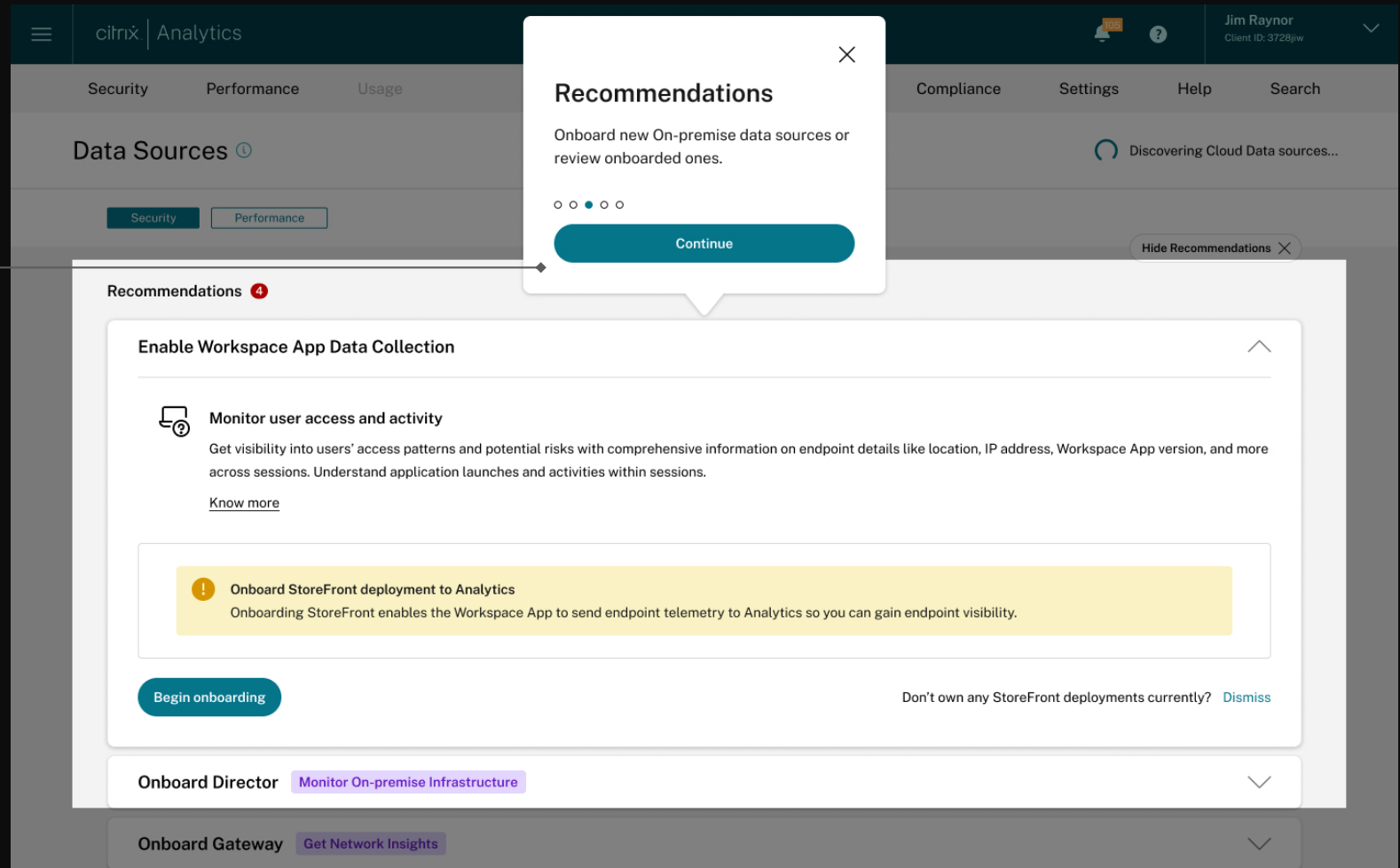
+ Add Another Site

In-line Guidance

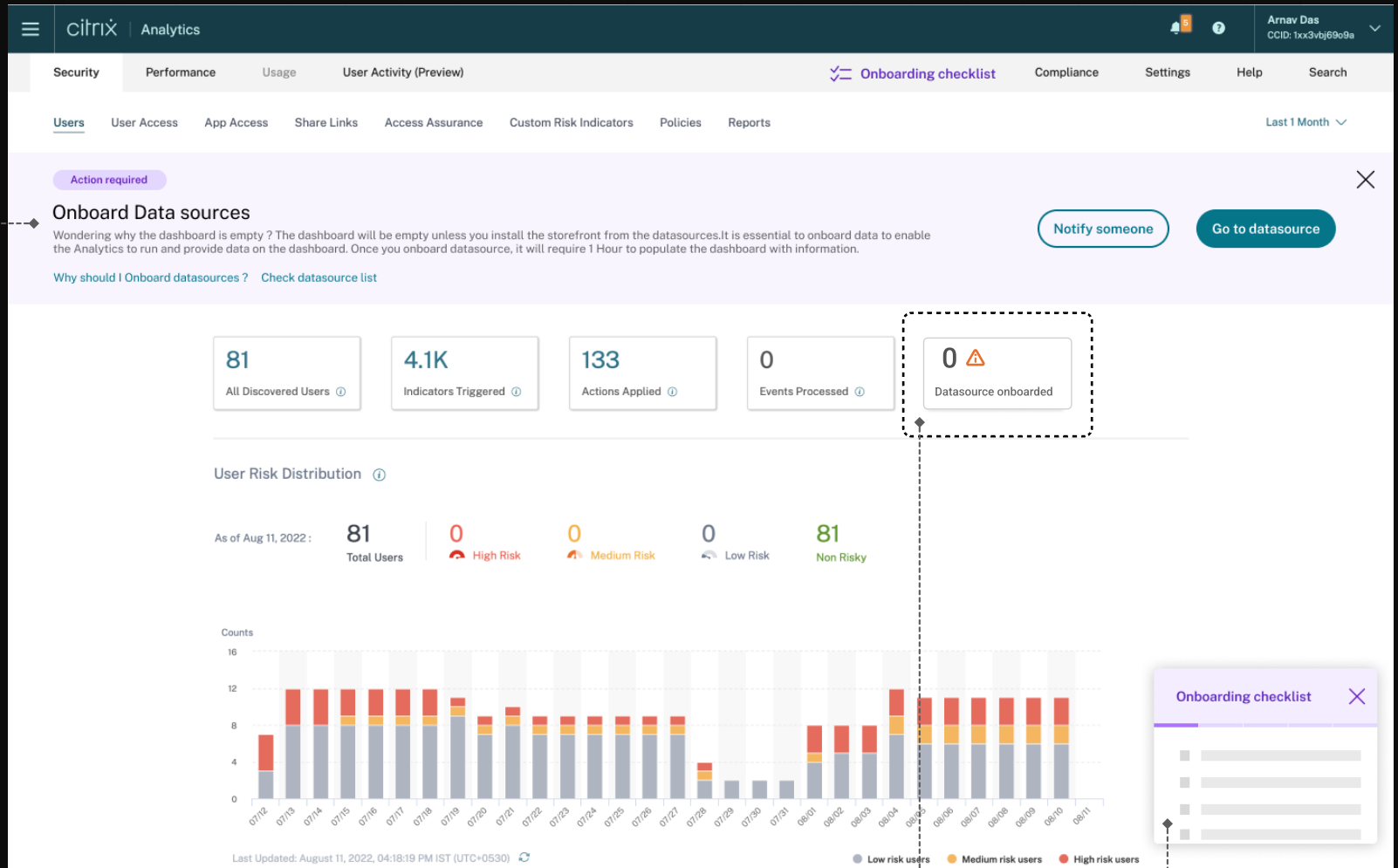
Other Solutions

1. Pendo tour

HAND-HELD GUIDANCE



NUDGES
from other touchpoints



Inclusion
of awareness
indicator

On-Call guidance

Other Solutions

RETHINKING Data cards

Datasources for **Security Analytics** ▾

🔍 Filters

VIRTUAL APPS AND DESKTOPS

3 Datasources supported

Storefront ⓘ ! Immediate Action Required

On-premise
Onboarding in progress

Workspace app enables following end point telemetires

Risk score Threat detection Risk Indicators [see more](#)

Applies for **Security & Performance**

Sites Connected	1
Events received	32

Dataprocessing Turn on to receive events

Storefront Available for onboarding	4
Onboarded	0

[Onboard Storefront](#) Storefront enables Workspace Apps to send events to Analytics

Monitor ⓘ

Cloud Service
✔ Onboarded

Monitor app enables following end point telemetires

Risk score Threat detection Risk Indicators [see more](#)

Applies for **Security**

Dataprocessing Status Turn On Datasources to receive events

Sites Connected	4
Events received	0

[Troubleshoot](#)

Cloud Datasources are automatically onboarded

Session Recording ⓘ

On-premise
Partially Onboarded

Session recording enables following end point telemetires

Risk score Threat detection Risk Indicators

Applies for **Security**

[Onboard](#)

ADM SERVICE

Gateway Supported

Gateway ⓘ ! Action Required

On-premise
Partially Onboarded

On-Call guidance

The screenshot displays the 'CAS Assistant' interface within the Citrix Analytics environment. The interface is designed to guide users through their onboarding process. At the top, it shows the user's name 'Arnav Das' and their CCID. Below this, a navigation bar includes 'Onboarding checklist', 'Compliance', 'Settings', 'Help', and 'Search'. The main content area is divided into several sections: 1. 'Security Admin Experience Level' showing 'Level 1' progress with a star icon. 2. 'Total Priority Tasks' and 'Feature discoveries' progress bars. 3. 'Priority Tasks (5)' section with three highlighted tasks: 'On-board StoreFront' (with a 'Pick up where you left off' button and arrow), 'On-board Gateway', and 'On-board Screen Recording'. 4. 'Advance to Level 2' section with three tasks: 'Schedule 4 custom Reports' (Gain 6 stars), 'Set 5 Policies' (Gain 10 stars), and 'Create 3 Risk Indicators' (Gain 9 stars). 5. 'Suggestions' section with a task: 'Enable Geofence to improve threathunt on location.' On the right side, there is a 'What's new' and 'Knowledge' section with search functionality, containing articles like 'Learn: What are Data Sources?' and 'Feedback: How to improve Risk scoring?'.

Impact and Outcome

- Reduced time product onboarding and startup
- Lesser customer calls for Product Managers
- Customer Retention
- Business objective alignment to design for On- premise users
- The design process helped engineering team to be aware of existing technical problems in-disguise, which degrades the current experience



FTU STOREFRONT ONBOARDING

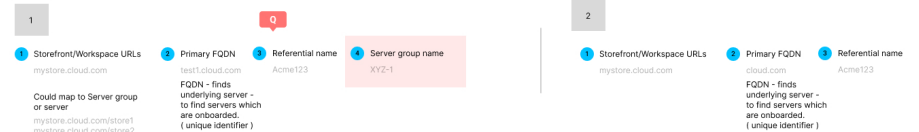
1 Storefront onboarding

How many No. of storefronts server ?

4 entities with status of onboarding



2 Storefronts details



3 StoreFront Onboarding initiates



4 User moves to external wizard

Downloads configuration file for StoreFront 1/Server group 1



5 Autodetect changes in Datasources page once User completes the onboarding through wizard



1 Notification of Initiation

Downloaded configuration file against each StoreFront

Configuration file downloaded on May 27, 3:15 PM by Allan Furmanski, L

Complete onboarding on wizard, once completed we will notify events
Analytics starts checking connection status periodically after a timeout.

2 Connection established for server group

Not established (after background check, if onboarding wasn't confirmed)

Have you completed the wizard part ?

Yes No

server 1 server 2

run the "replicate" command

Troubleshoot Use Analyzer tool

Complete your onboarding

Re-start the wizard installations/ I want to redownload the installation file and download

100% Completion at server group level (all servers in a server group are onboarded)

3 To start receiving events:

1. Turned on Datasources (if Dataprocessing is off, prompt to switch on)

2. Launch session from supported CWA from the corresponding Storefront server

3. wait for some time (couple of minutes)

*Simulated events/session launch can confirm the connection between CWA and Analytics

ⓘ If we can detect the servers attached to a server group we'll have granularity at server connection level