

ITASEC

Security operations modernized: Microsoft unified SIEM/SOAR and XDR approach

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Microsoft



April 2021



Multi-cloud

SIEM

Azure Sentinel



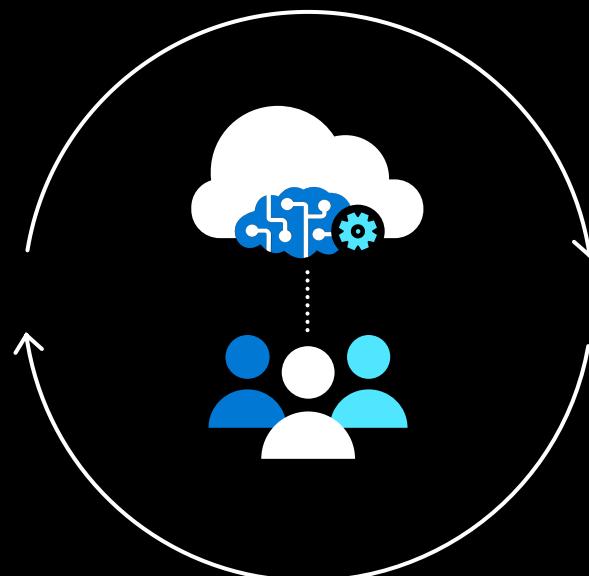
Partnerships

Prevent

Protect

Microsoft Defender

XDR



SIEM

Azure Sentinel



Multi-cloud



Partnerships

Cloud native, any data, any entity



Cloud native



Any data



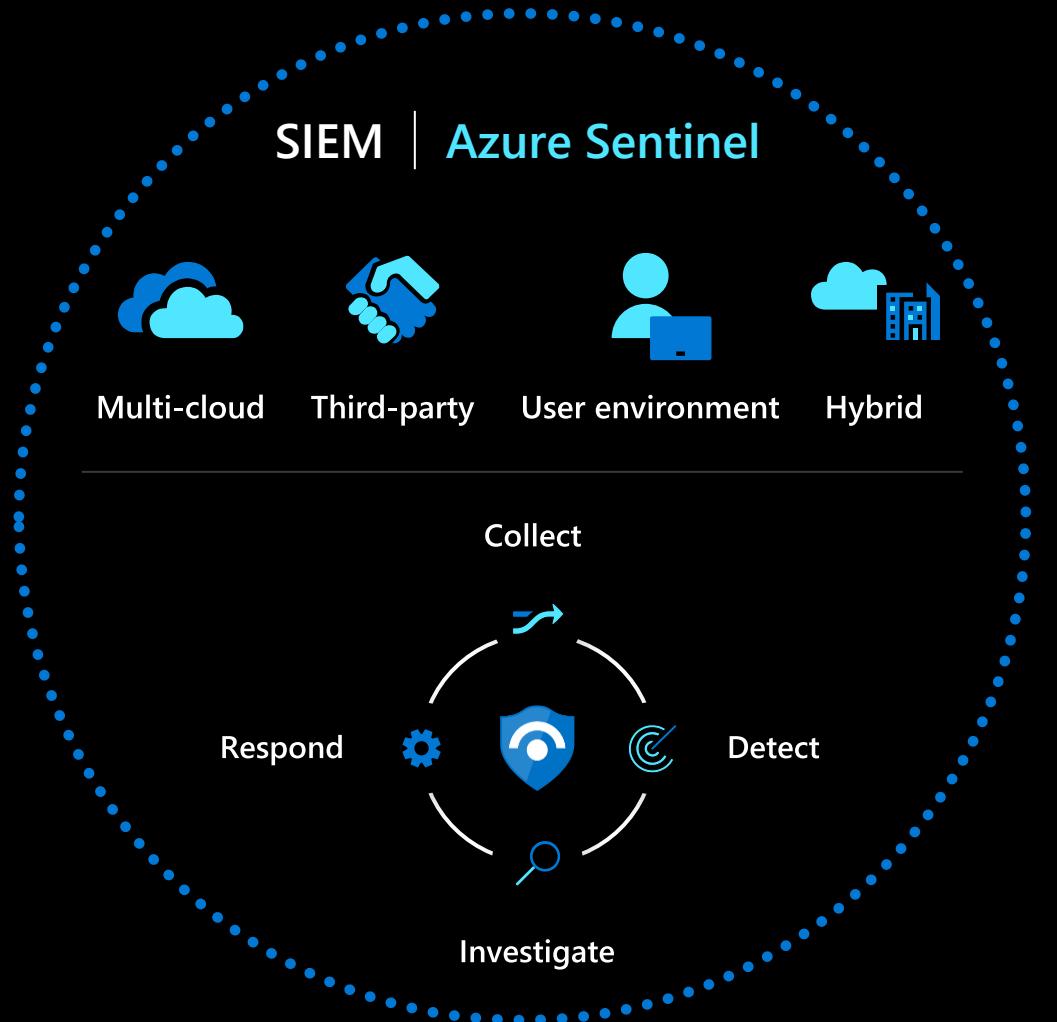
AI



Automation

Gain insights across your entire enterprise

Visualize and investigate the attack chain with cloud-native SIEM



- Collect security data at cloud scale and integrate with your existing tools
- Leverage AI to detect emergent threats and reduce alert fatigue by 90 percent
- Respond rapidly with built-in orchestration and automation



Multi-cloud

SIEM

Azure Sentinel



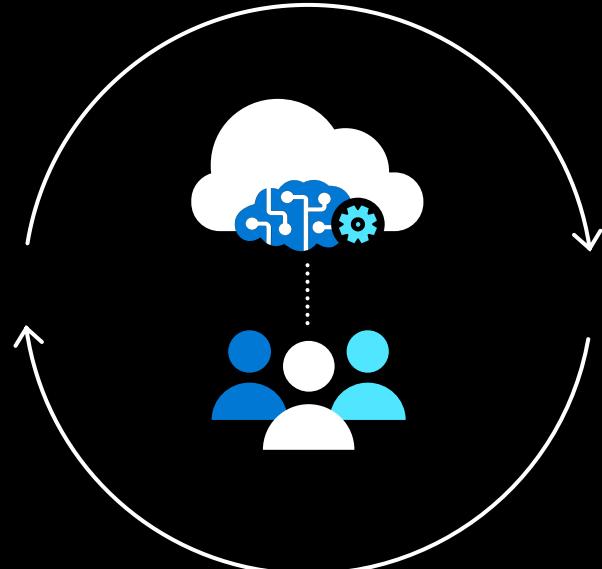
Partnerships

Prevent

Protect

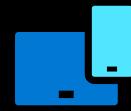
Microsoft Defender

XDR





Identities



Devices



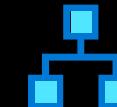
Data



Infrastructure



Apps



Network

Microsoft Defender XDR

Cross-domain protection

Microsoft 365 Defender



Identities



Endpoints



Apps



E-mail



Docs



Cloud Apps

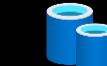
Azure Defender



SQL



Server VMs



Containers



Network



IoT



Azure App Services

Microsoft Defender XDR

Detect and respond across end-user environments

Prevent and detect threats, hunt for attacks, and coordinate response across domains

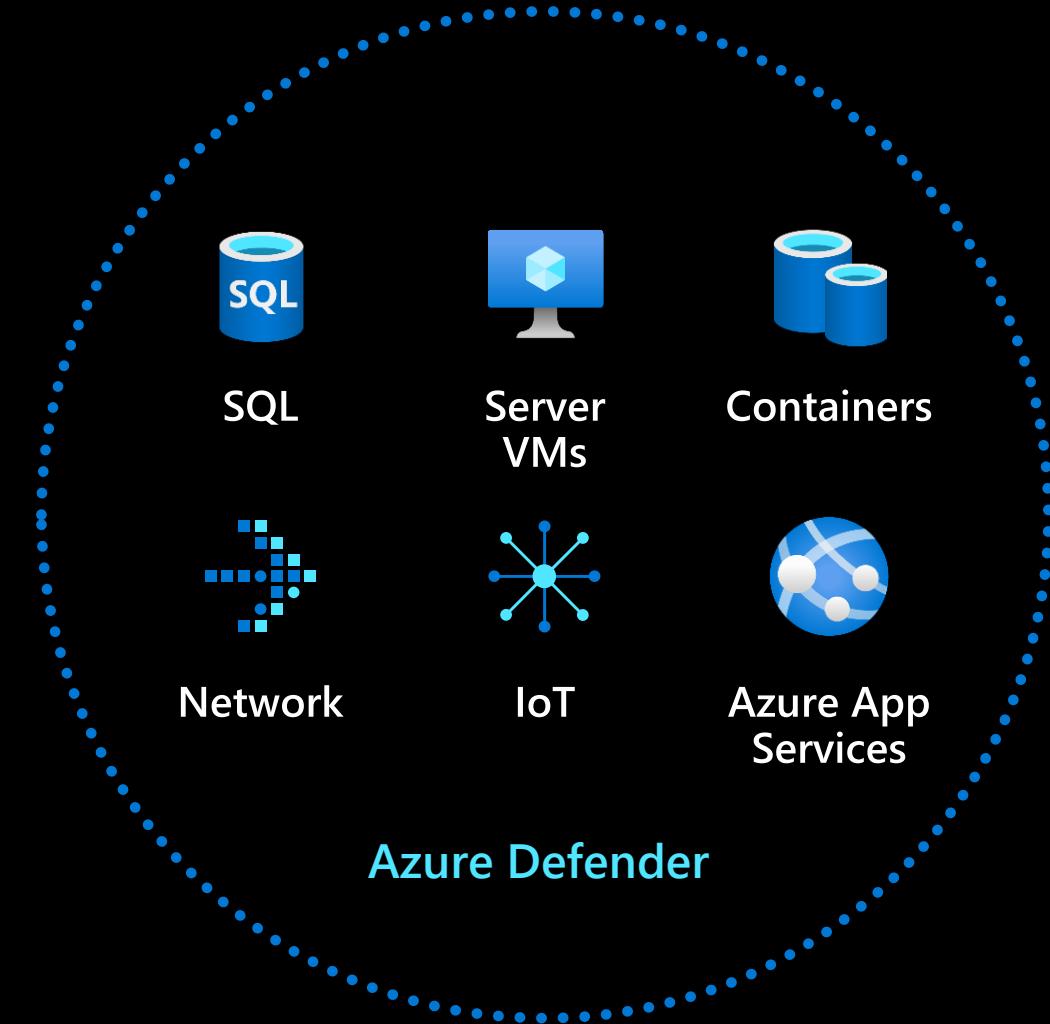


- Stop attacks before they occur by reducing your attack surface
- Detect and automate across domains, integrating threat data for rapid response
- Hunt across domains and create custom tools using your unique expertise
- View alerts and remediate across your Microsoft 365 environment in a single dashboard

Intelligent detection and response for Azure and hybrid workloads

Use industry-leading threat intelligence to gain deep insights into your cloud workloads

- Protect data services, cloud native services, servers, and IoT from threats
- Extend protection to on-premises and multi-cloud for virtual machines and SQL databases using Azure Arc
- With prioritized alerts, focus on what matters the most

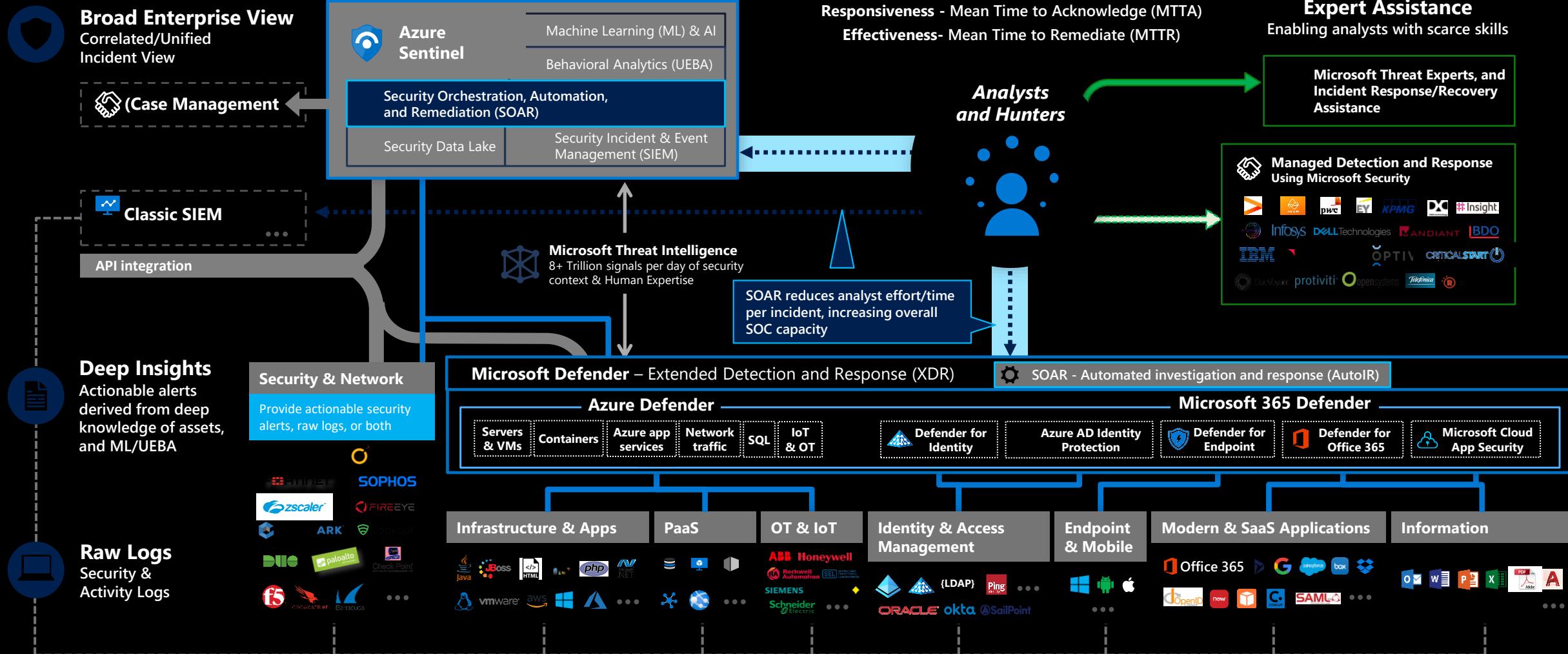


Microsoft Modern SOC Approach

Legend

- Event Log Based Monitoring
- Investigation & Proactive Hunting

- Outsourcing
- Consulting and Escalation
- Native Resource Monitoring



SOC Model → automation role



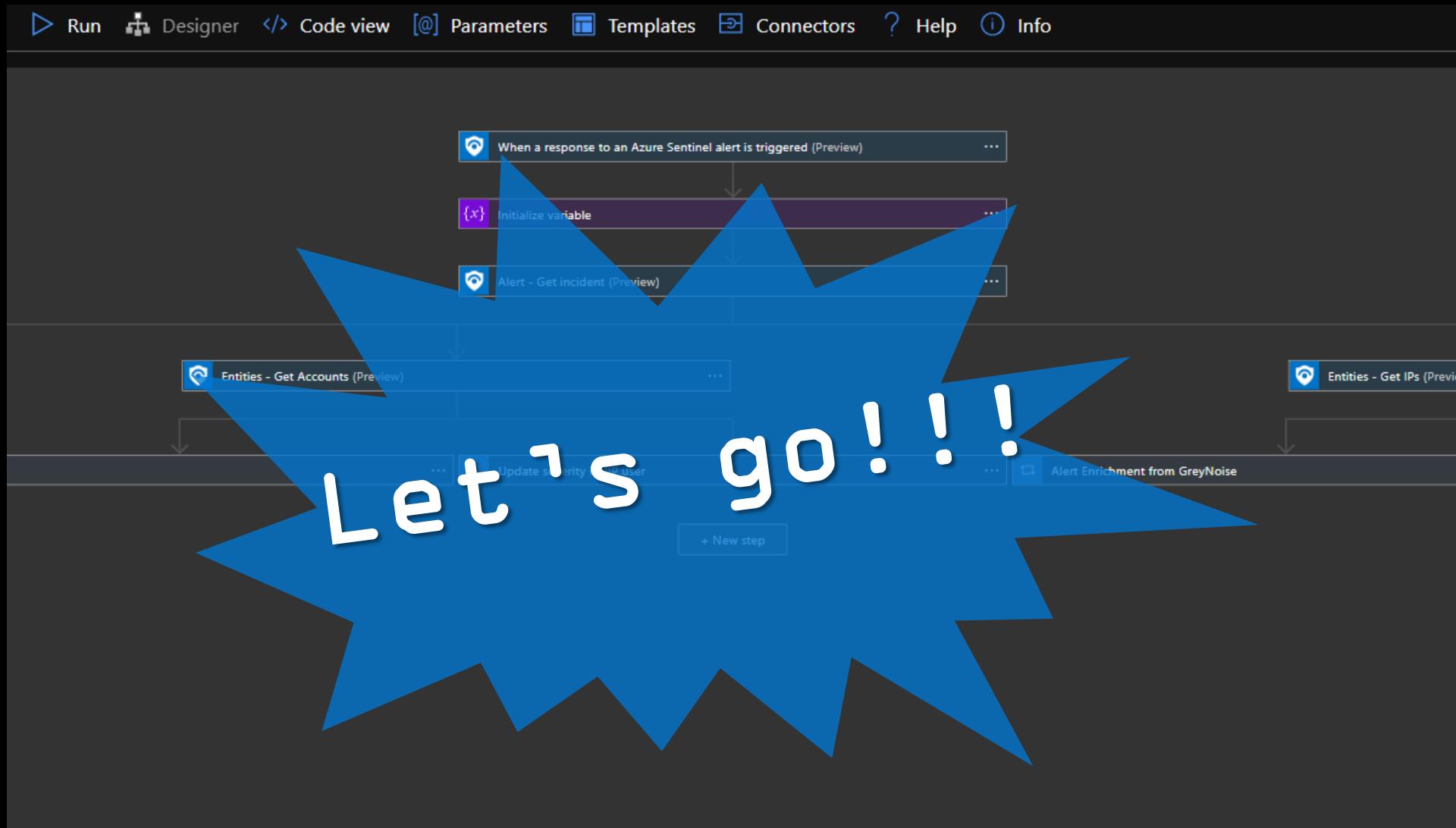
Empower humans with automation

Automation is not about using efficiency to remove humans from the process—it is about empowering humans. We continuously think about how we can automate repetitive tasks from the analyst's job, so they can focus on the complex problems that people are uniquely able to solve.

SOC Metrics

- Time to acknowledge (TtA)
- Time to remediate (TtR)
- Incidents remediated (manually/with automation)
- Escalations between each tier

SOAR DEMO – custom playbook ITASEC21



ITASEC21_SOAR - Microsoft Azure Incidents [Self Service view] | Ser +

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ITASEC21_SOAR | Logic app designer

Logic app

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Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Development Tools

- Logic app designer (selected)
- Logic app code view
- Versions
- API connections
- Quick start guides

Settings

- Workflow settings
- Authorization
- Access keys
- Identity
- Properties
- Locks

Monitoring

Alerts

When a response to an Azure Sentinel alert is triggered (Preview)

{x} Initialize variable

Alert - Get incident (Preview)

Create Record - Service Now ... Entities - Get Accounts (Preview) ... Entities - Get IPs (Preview) ...

For each ... Update severity if VIP user ... Alert Enrichment from GreyNoise ... Alert Enrichment from VirusTotal ...

+ New step

```
graph TD; Trigger[When a response to an Azure Sentinel alert is triggered (Preview)] --> Init[Initialize variable]; Init --> Alert[Alert - Get incident (Preview)]; Alert --> CreateRecord[Create Record - Service Now ...]; Alert --> GetAccounts[Entities - Get Accounts (Preview) ...]; Alert --> GetIPs[Entities - Get IPs (Preview) ...]; GetAccounts --> ForEach[For each ...]; GetAccounts --> UpdateSeverity[Update severity if VIP user ...]; GetIPs --> GreyNoise[Alert Enrichment from GreyNoise ...]; GetIPs --> VirusTotal[Alert Enrichment from VirusTotal ...];
```

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Monitoring Alerts

When a response to an Azure Sentinel alert is triggered (Preview)

{x} Initialize variable

Alert - Get incident (Preview)

* Specify subscription id
Subscription ID

* Specify resource group
Resource group

* Specify workspace id
Workspace ID

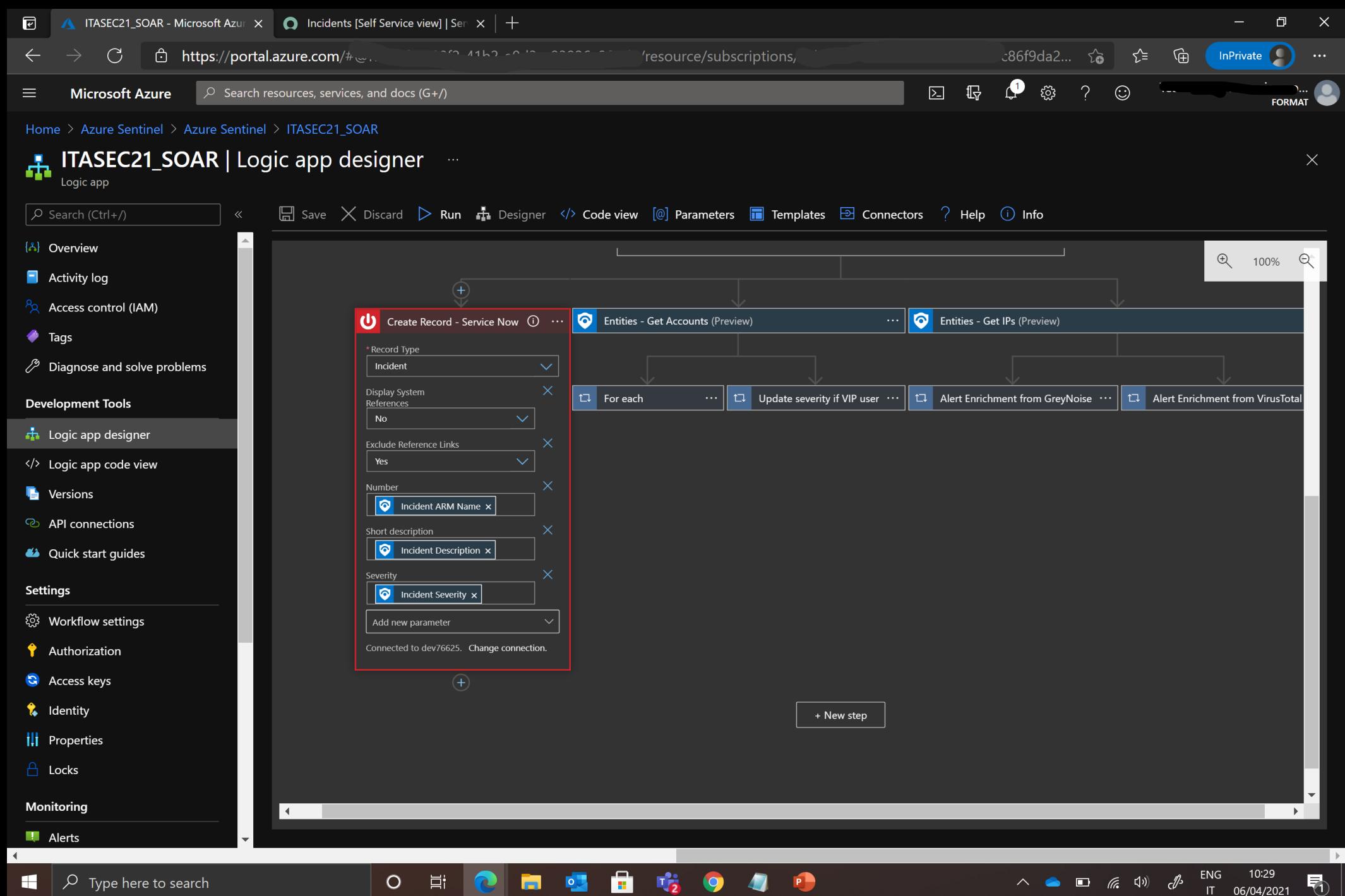
* Specify alert id
System alert ID

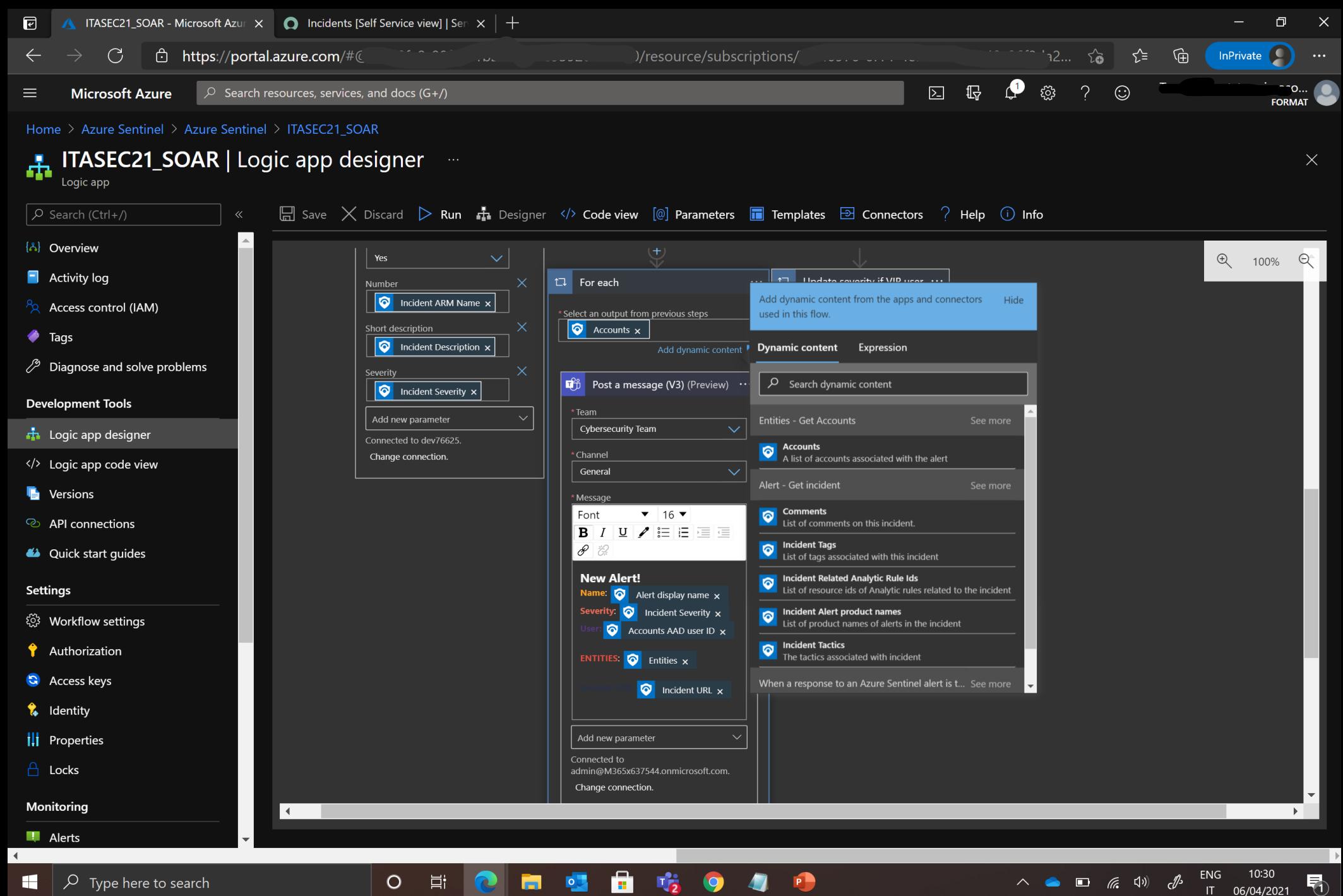
Connected to admin@M365x637544.onmicrosoft.com. Change connection.

Create Record - Service Now ... Entities - Get Accounts (Preview) Entities - Get IPs (Preview) ...

For each ... Update severity if VIP user ... Alert Enrichment from CreateNoise ... Alert Enrichment from ViewTotal ...

```
graph TD; A[When a response to an Azure Sentinel alert is triggered (Preview)] --> B[Initialize variable]; B --> C[Alert - Get incident (Preview)]; C --> D[Create Record - Service Now]; C --> E[Entities - Get Accounts (Preview)]; C --> F[Entities - Get IPs (Preview)]; E --> G[For each]; F --> G; G --> H[Update severity if VIP user]; G --> I[Alert Enrichment from CreateNoise]; G --> J[Alert Enrichment from ViewTotal]
```





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Overview Activity log Access control (IAM) Tags Diagnose and solve problems Development Tools Logic app designer Logic app code view Versions API connections Quick start guides Settings Workflow settings Authorization Access keys Identity Properties Locks Monitoring Alerts

100%

The screenshot shows a logic app workflow titled "ITASEC21_SOAR". The workflow starts with a "Create Record - Service Now" step, which is configured to create an "Incident" record. This is followed by an "Entities - Get Accounts (Preview)" step, which retrieves accounts from a connection to "admin@M365x637544.onmicrosoft.com". The next step is an "Entities - Get IPs (Preview)" step, also connected to the same account. Both of these steps feed into a "For each" loop, which iterates over the retrieved "Accounts". Inside the loop, there is a "Post a message (V3) (Preview)" step, followed by a "Send approval email" step, and finally an "If request approved" step. The logic app ends with an "Update severity if VIP user ..." step. The "Designer" tab is selected in the top navigation bar.

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https://portal.azure.com/#resource/subscriptions/

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Workflow settings Authorization Access keys Identity Properties

Send approval email

To: antonio.formato@microsoft.com; rebecca.travasi@microsoft.com; rebecca.travasi@labformat.com

User Options: Approve, Reject

Subject: Disable User: Accounts Name Approval Request

Hide HTML message: No

Importance: High

Show HTML confirmation dialog: Yes

Connected to admin@M365x637544.onmicrosoft.com. Change connection.

If request approved

And
Selected... is equal to Approve

True: Update user

False: Add an action

Type here to search

10:21 07/04/2021 ENG IT

ITASEC21_SOAR - Microsoft Azure

https://portal.azure.com/#resource/subscriptions/1e38ed0/resourceGroups/ITASEC21_SOAR/providers/Microsoft.Logic/worksflows/ITASEC21_SOAR

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- Properties

If request approved
And
Selected... is equal to Approve
True: Update user
Display Name: concat(...)
Given Name:
Mail Nickname:
Surname:
User Principal Name:
Account Enabled: No
Connected to admin@M
False: Add an action

100%

Type here to search

Windows Start button

File Explorer

OneDrive

Microsoft Edge

Microsoft Store

Teams

PowerShell

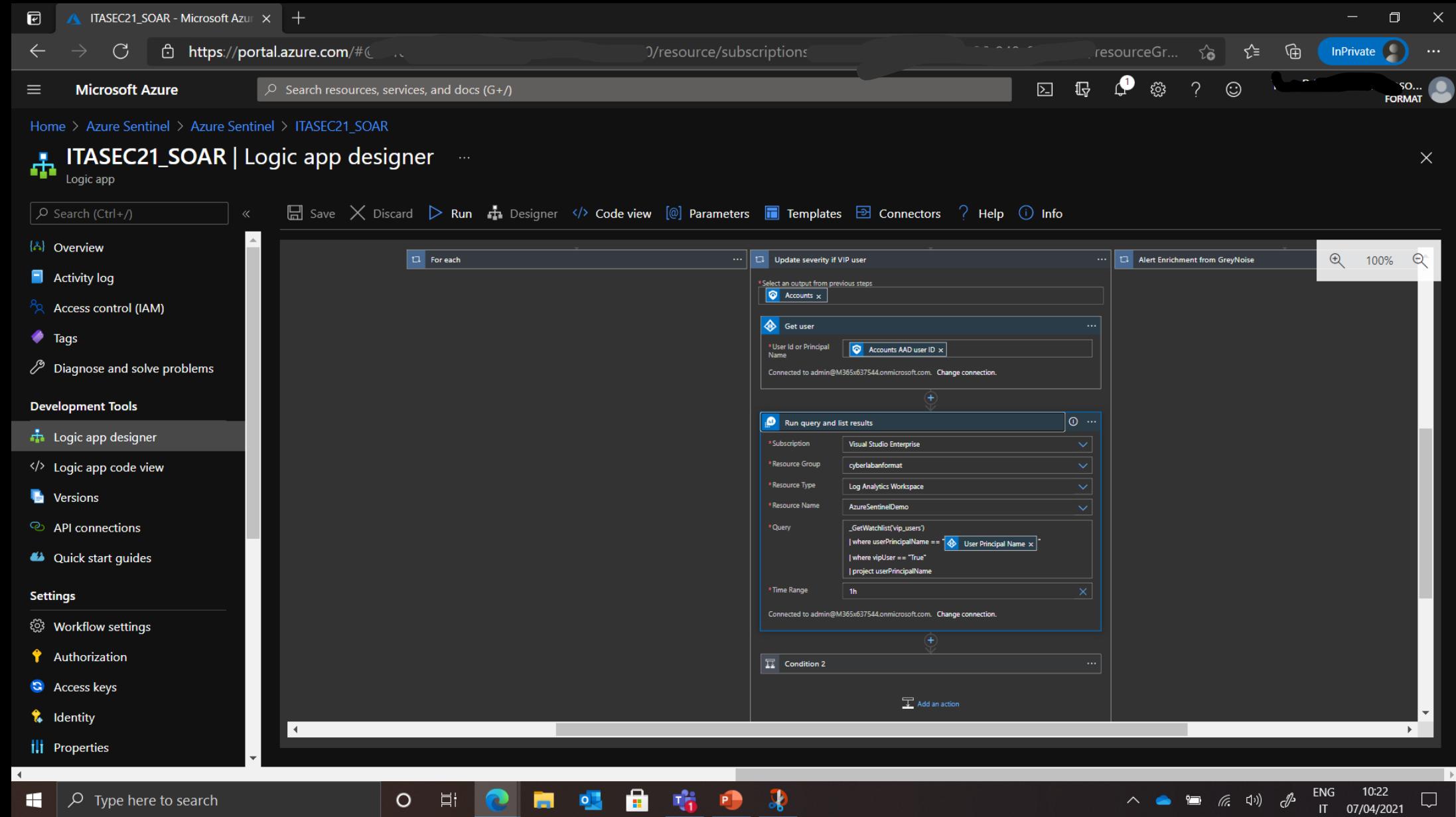
Clipboard

Network

Cloud

Signal

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Settings Workflow settings Authorization Access keys Identity Properties

Connected to admin@M365x63754.onmicrosoft.com. Change connection.

Condition 2
And
[f] length(...) x is not equal to 0

True: Update incident (Preview)
* Incident ARM id: Incident ARM ID
Owner Object Id / UPN: Unique identifier of a user (Ex: 'user@tenant.onmicrosoft.com' or '5f6ce5c7-...')
Assign/Unassign owner: Assign or unassign incident owner
Severity: High
Status: Informational
Tags to add tag - 1 tag: Add new item
Add new parameter
Connected to admin@M365x63754.onmicrosoft.com. Change connection.

False: Add an action

100%

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Settings Workflow settings Authorization Access keys Identity Properties

Alert - Get incident (Preview)

Entities - Get IPs (Preview)

Entities list Entities x Connected to admin@M365x637544.onmicrosoft.com. Change connection.

Alert Enrichment from GreyNoise

Select an output from previous steps IPs x Alert Enrichment from Greynoise Parse JSON to get GreyNoise response Add comment to incident (V3) 3 (Preview)

Alert Enrichment from VirusTotal

Select an output from previous steps IPs x HTTP Parse JSON Condition Add an action

+ New step

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Update severity if VIP user

Alert Enrichment from GreyNoise

Select an output from previous steps
IPs

Alert Enrichment from Greynoise

Parse JSON to get GreyNoise response

Add comment to incident (V3) 3 (Preview)

Incident ARM id
GreyNoise report for IP Address
Classification: classification
Name: name
Link to Greynoise: link
Last Seen: last_seen
Noise: noise

Connected to admin@M365x637544.onmicrosoft.com. Change connection.

Add an action

100%

The screenshot shows the Azure Logic App Designer interface. A workflow is being built to enrich alerts. It starts with an 'Update severity if VIP user' trigger, followed by an 'Alert Enrichment from GreyNoise' action (which is currently selected). This is connected to a 'Parse JSON to get GreyNoise response' action. Finally, it leads to an 'Add comment to incident (V3) 3 (Preview)' action. The logic app is connected to an administrator account. The left sidebar shows various development tools and settings, and the bottom navigation bar includes a search bar and system status indicators.

ITASEC21_SOAR - Microsoft Azure

https://portal.azure.com/#resource/subscriptions/7c8f3d7e-9b7d-4a9a-9a1c-0d08a3a6a4a5/resourceGroups/ITASEC21_SOAR/providers/Microsoft.Logic/workflows/ITASEC21_SOAR

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Parse JSON to get GreyNoise response

Add comment to incident (V3) 3 (Preview)

Incident ARM id: Incident ARM ID

Incident comment message:

- GreyNoise report for: IP Address
- Classification: classification
- Name: name
- Link to GreyNoise: link
- Last Seen: last_seen
- Noise: noise

Connected to admin@M365x637544.onmicrosoft.com. Change connection.

Add an action

Parse JSON

Content: Body

Schema:

```
{ "properties": { "content": { "properties": { "as_owner": { "type": "string" }, "asn": { "type": "integer" } } } }}
```

Use sample payload to generate schema

Condition

And

True

Send Data (Preview)

Add comment to incident (V3) (Preview)

Incident ARM id: Incident ARM ID

Incident comment message:

False

Add comment to incident (V3) 2 (Preview)

100%

Type here to search

O

File

Cloud

OneDrive

Windows Store

Teams

PowerPoint

Snipping Tool

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SCAN ME !

QR Code to Playbook
Template on GitHub



Domande? Unmute o scrivici su Slack **#stakeholder-space**



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Thank you