
AWS
re:Invent
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PRT044

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Secure access on AWS with ZTNA 2.0

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WORK IS NOW

AN ACTIVITY, NOT A PLACE



APPS ARE EVERYWHERE

80% of organizations have a hybrid cloud strategy, and the average organization uses **110 SaaS applications.**

USERS ARE EVERYWHERE

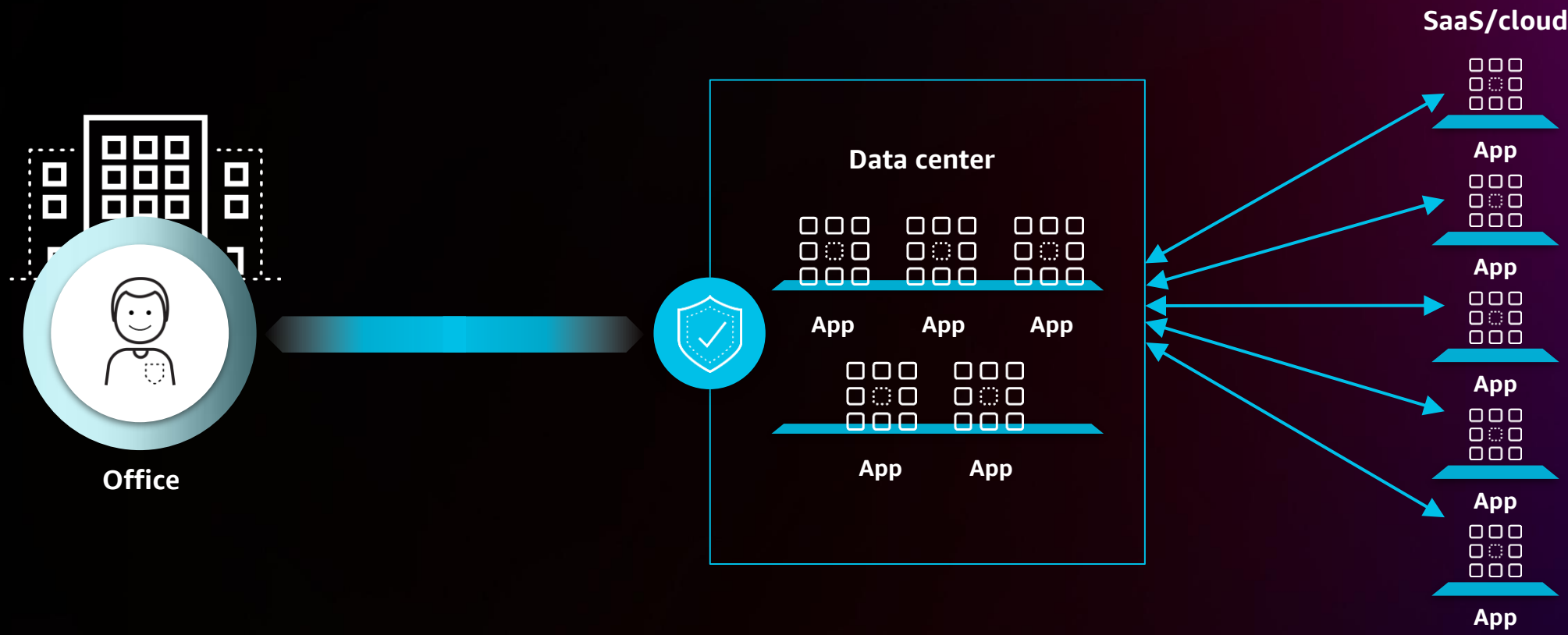
76% of employees want to be hybrid, even after the pandemic.

(The State of Hybrid Workforce Security, 2021)

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SECURITY SEEMED SIMPLER WHEN

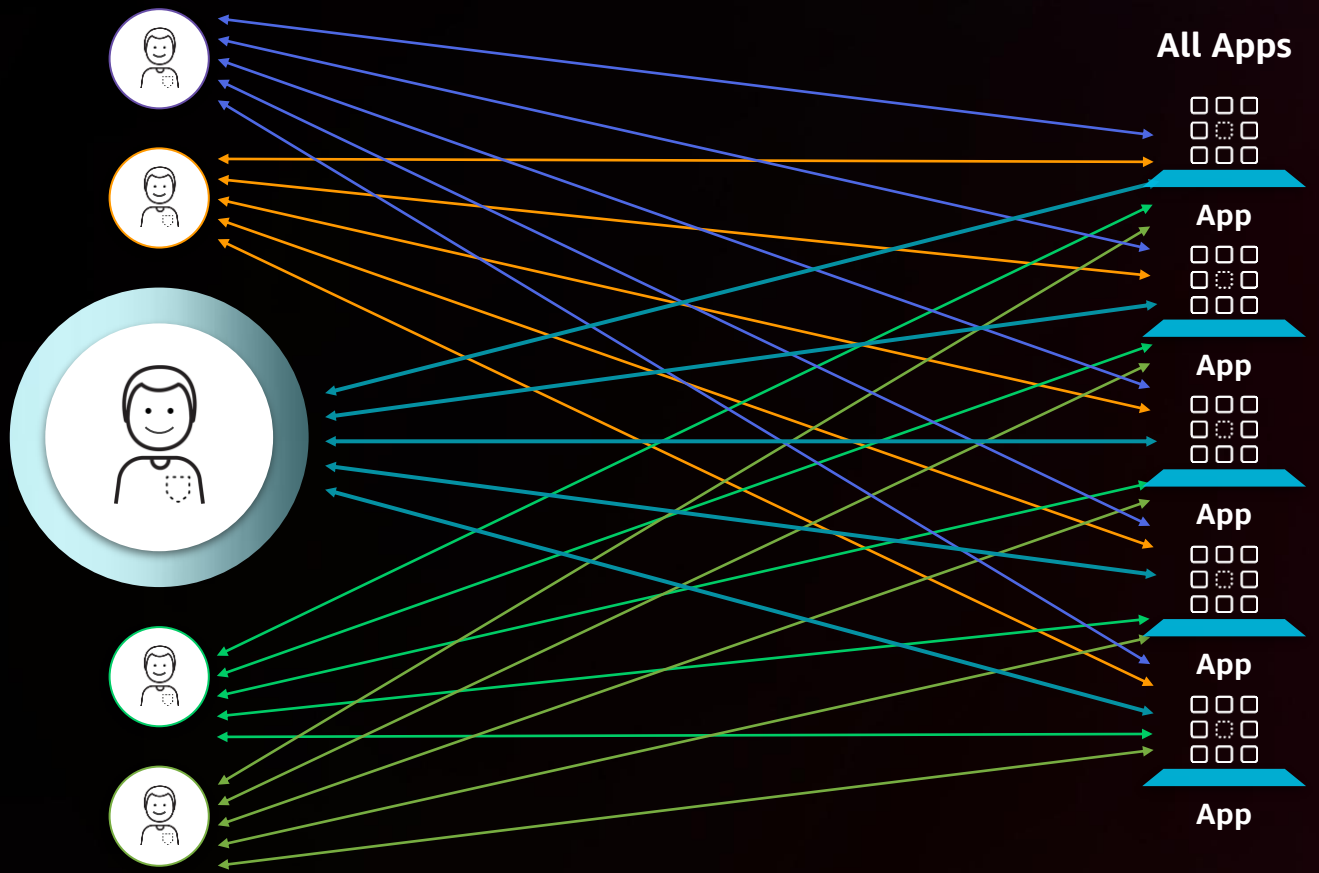
WORK WAS A PLACE YOU WENT TO



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SECURITY IMPLICATIONS OF HYBRID WORK

THE AREA OF IMPACT HAS GROWN



BIGGER AREA OF IMPACT MAY MEAN MORE SECURITY EVENTS

92%

of technology executives said that their companies experienced a cybersecurity event over the past 12 months.

(FORRESTER, 2021)

A NEW SECURITY CONCERN, A NEW SECURITY TOOL

76

The average number of security tools in an organization (+19% over the past two years, from 64% to 76%).

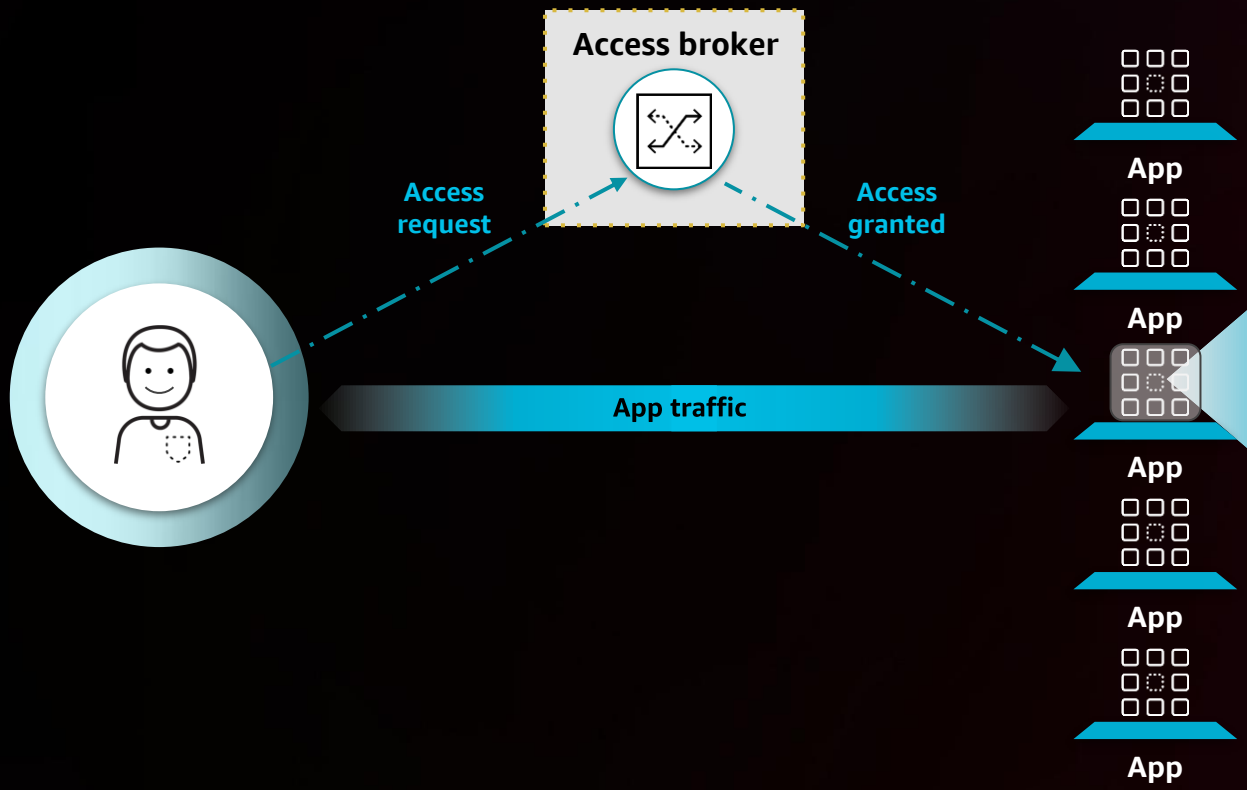
(PANASEER, 2022)

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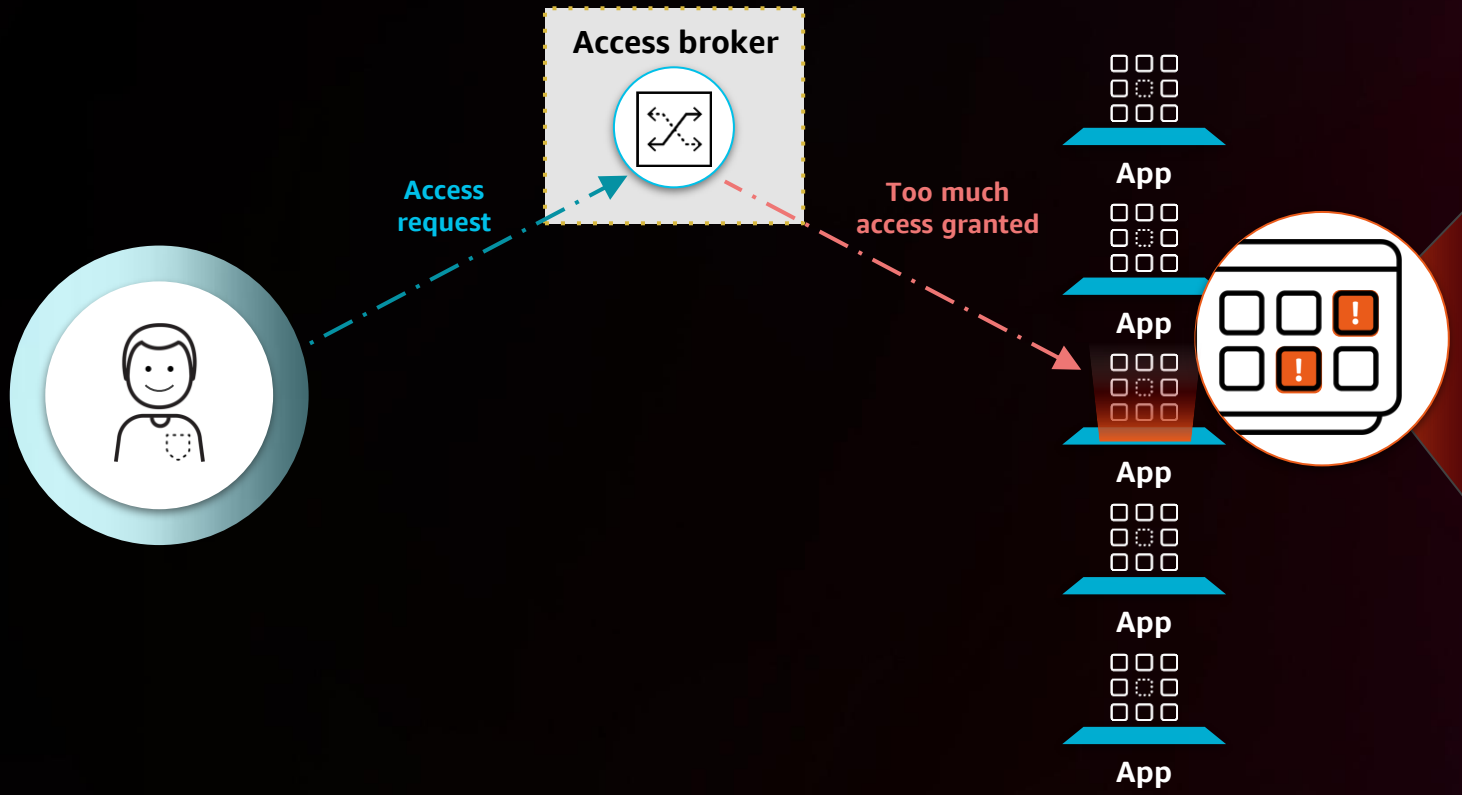
THE INDUSTRY TRIED TO SOLVE SECURE ACCESS WITH ZTNA 1.0



- User connects to the access broker
- Access is granted
- User communicates directly with the application

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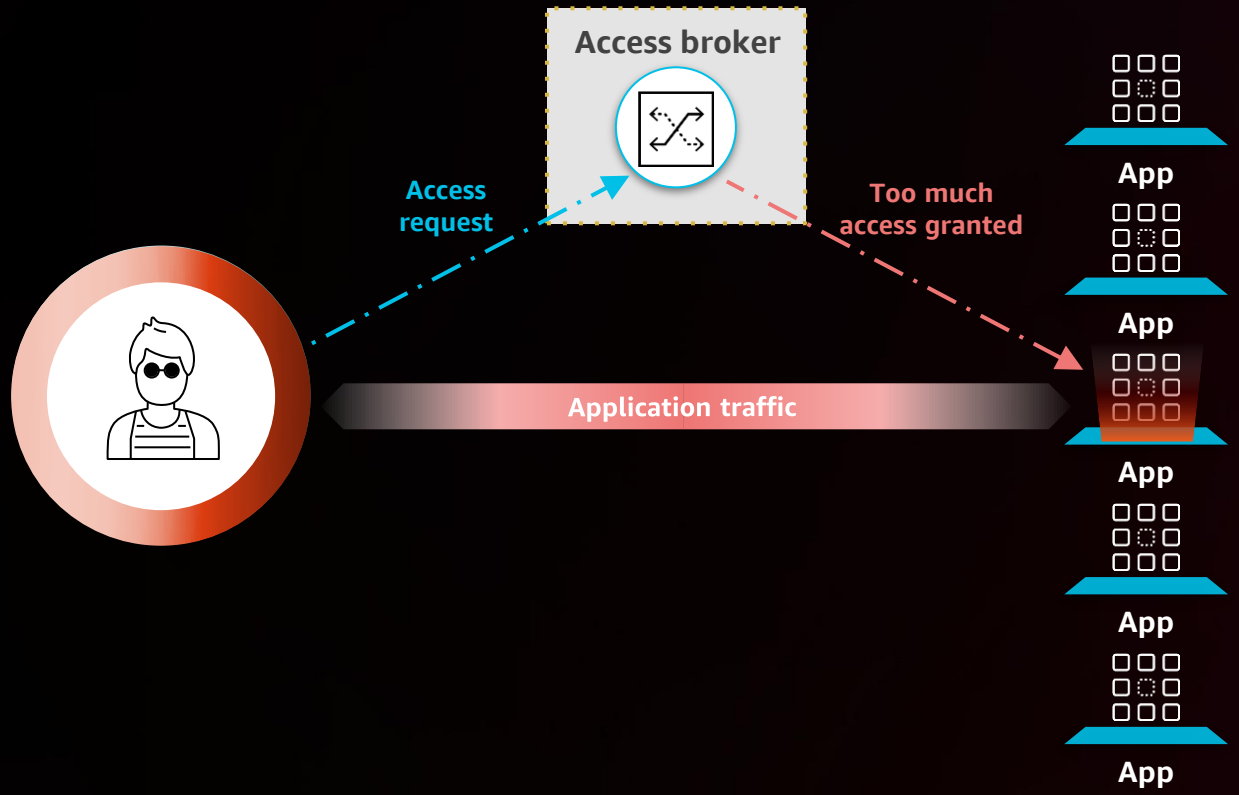
BUT ZTNA 1.0 HAD SOME ISSUES:
THE PRINCIPLE OF LEAST PRIVILEGE WAS NOT A PRIORITY



- Application is defined only based on IP and port
- Grants too much access
- Applications can have dynamic ports or port ranges

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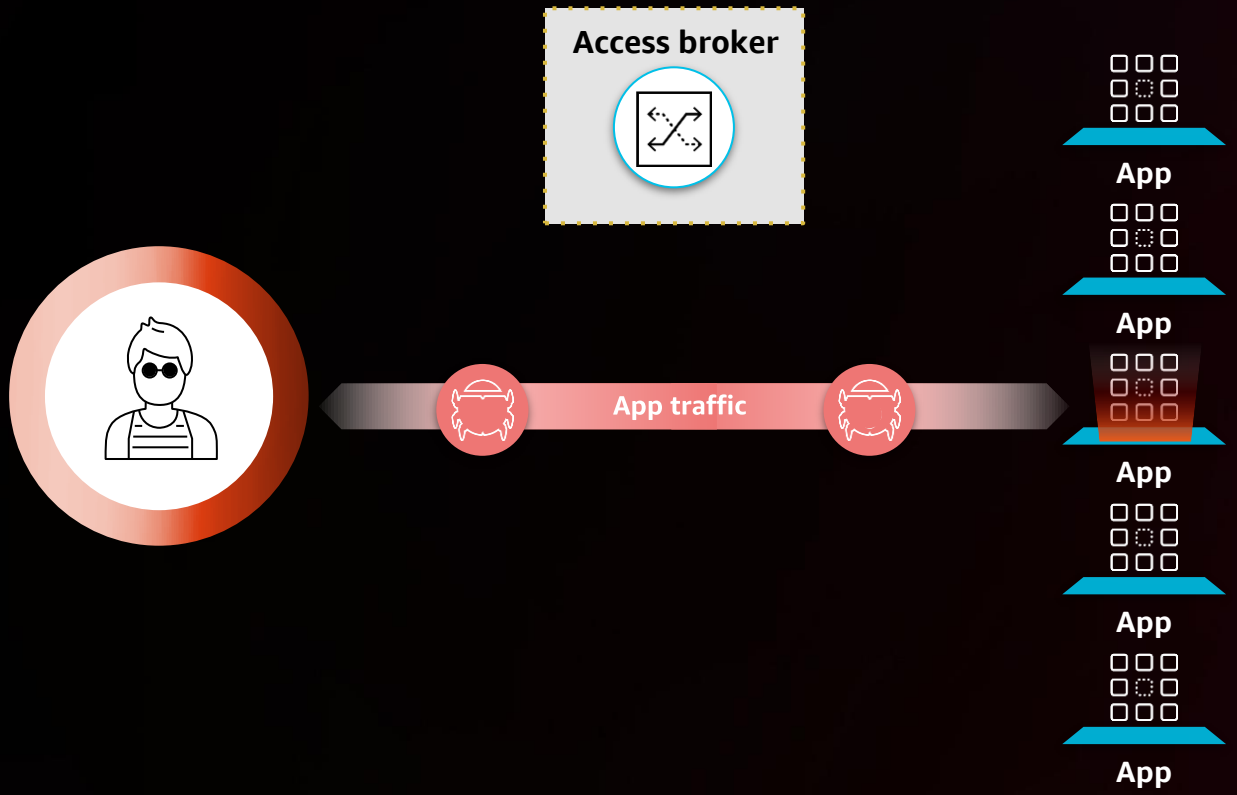
BUT ZTNA 1.0 HAD SOME ISSURES:
DEFAULT TO ALLOW AND IGNORE



- Once access is granted, everything is trusted
- Assumes user and application behavior won't change
- 100% of security events happen on allowed activity

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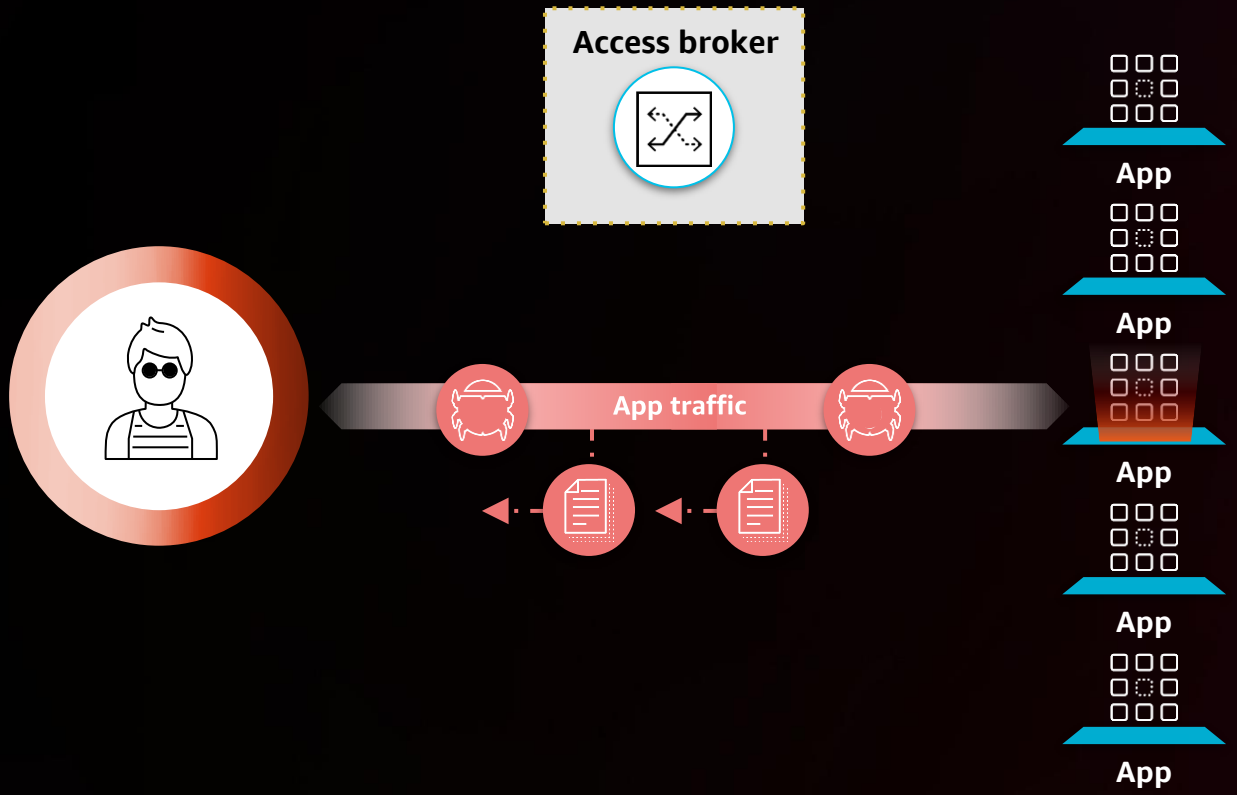
BUT ZTNA 1.0 HAD SOME ISSUES:
NO REQUIRED SECURITY INSPECTION



- Application traffic is not inspected
- Cannot prevent malware or lateral movement
- Security through obscurity only

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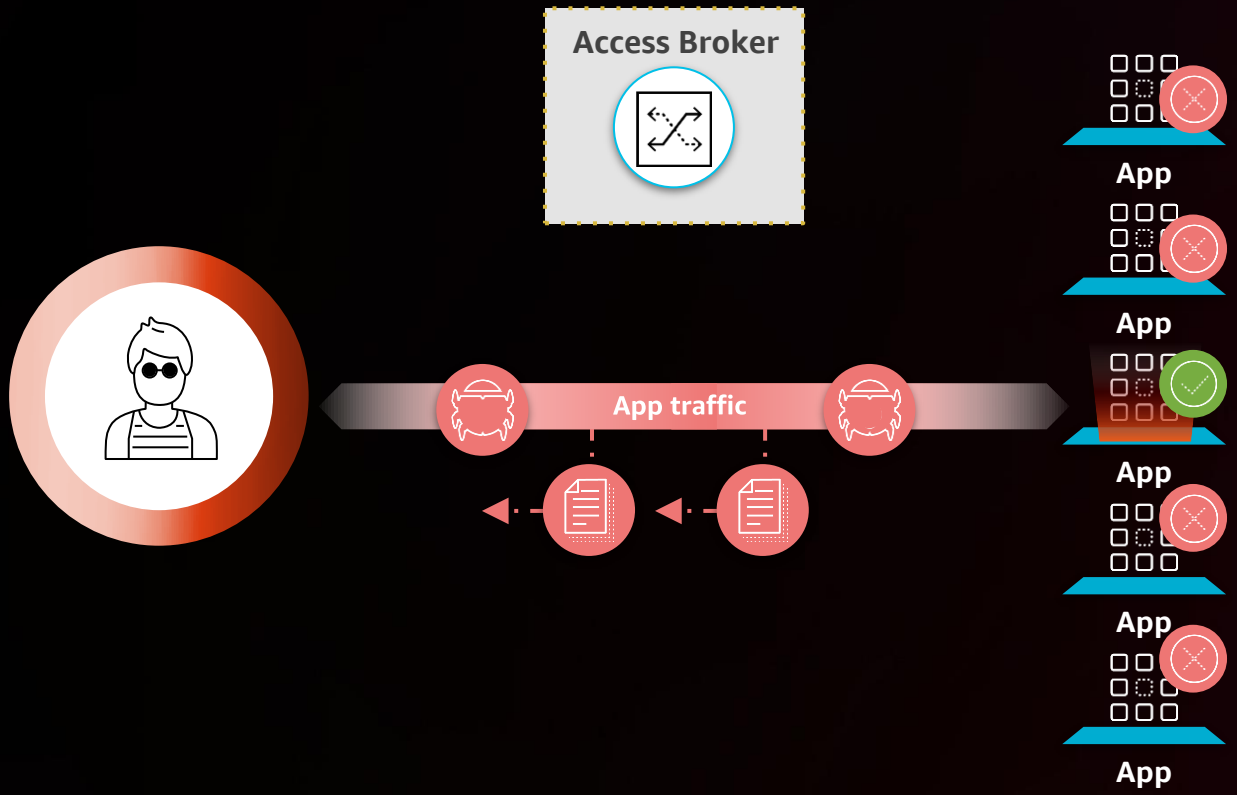
BUT ZTNA 1.0 HAD SOME ISSUES:
INSUFFICIENT DATA PROTECTION



- Lacks sufficient visibility and control of data
- Difficult to stop data exfiltration from insiders or unauthorized external users

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BUT ZTNA 1.0 HAD SOME ISSUES:
DIDN'T ACCOUNT FOR SECURITY OF ALL APPLICATIONS



- Only supports a subset of private applications
- Cannot address cloud-native applications, applications with dynamic ports, or server-initiated applications
- Insufficient attention to SaaS applications

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IT'S DIFFICULT TO UPDATE EXISTING SECURITY SOFTWARE WITH NEW APPROACHES

ZTNA 2.0 OFFERS A PARADIGM SHIFT

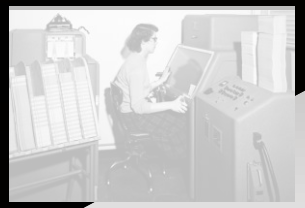


ZTNA 2.0



2010s

ZTNA 1.0



PRE-2010

VPN

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INTRODUCING

ZTNA 2.0



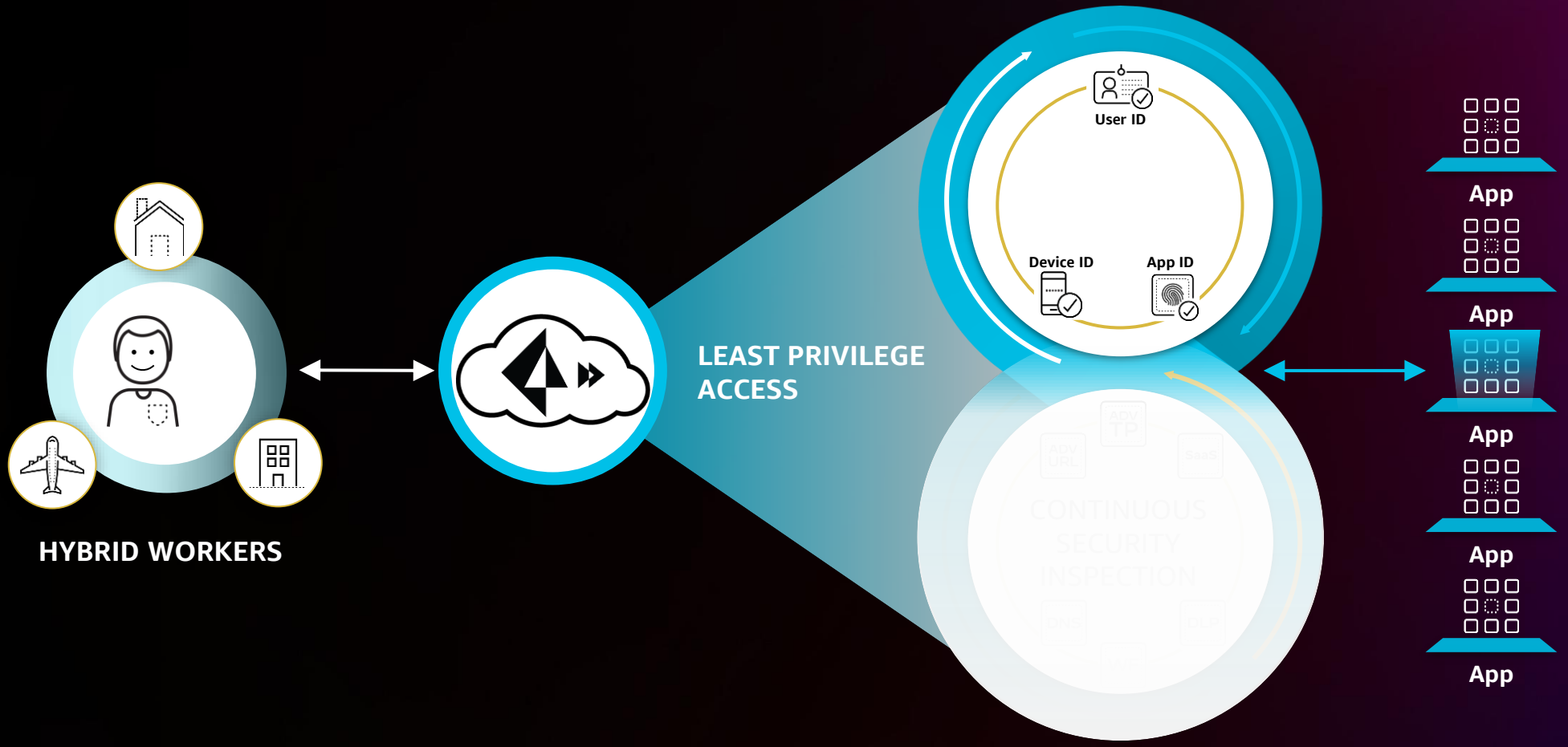
ZTNA 1.0	ZTNA 2.0
Overlooks the principle of least privilege	**True least privilege access**
Allows and ignores	**Continuous trust verification**
Lacks security inspection	**Continuous security inspection**
Doesn’t protect all data	**Protects all data**
Can’t effectively secure all applications	**Secures all applications**

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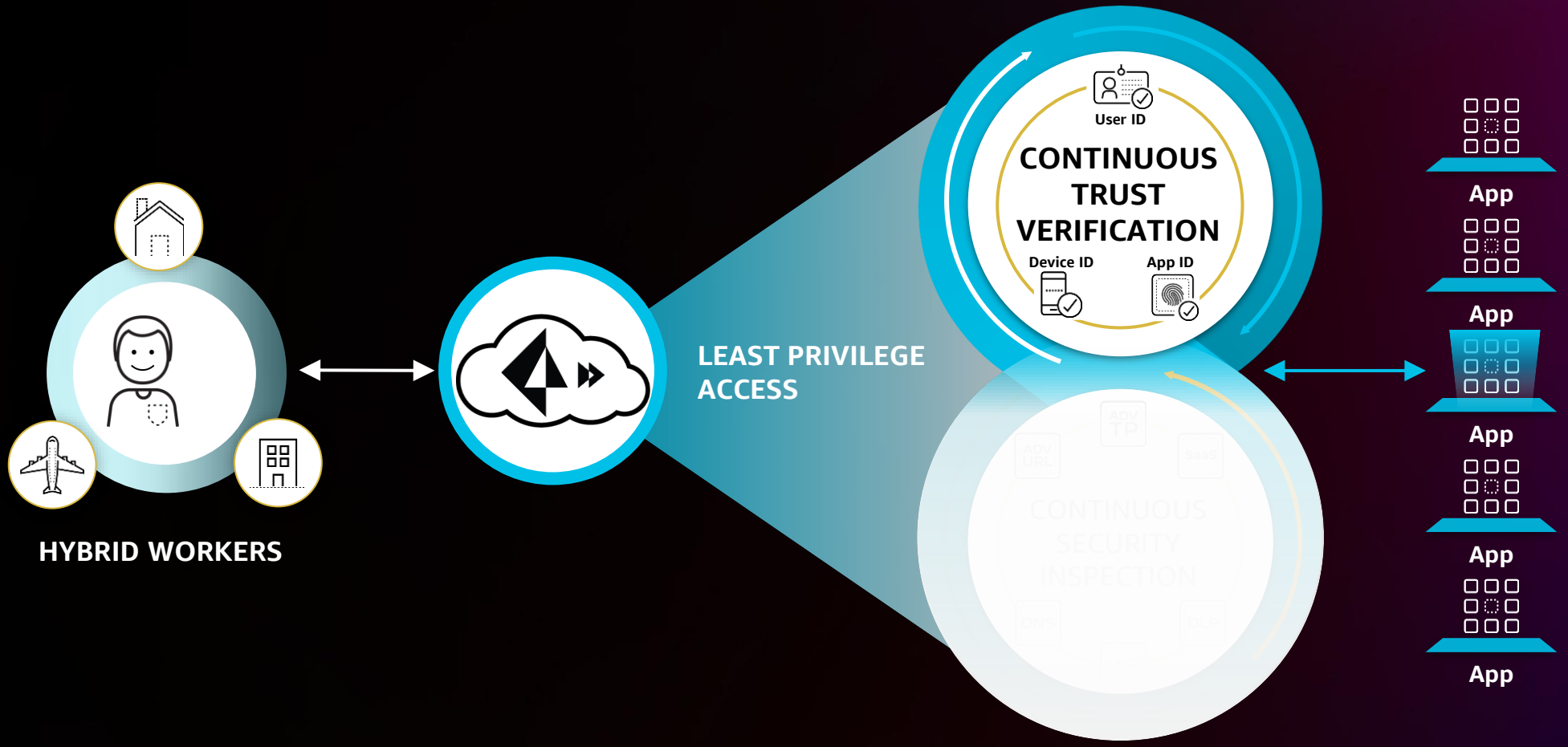
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Reduce the area of impact



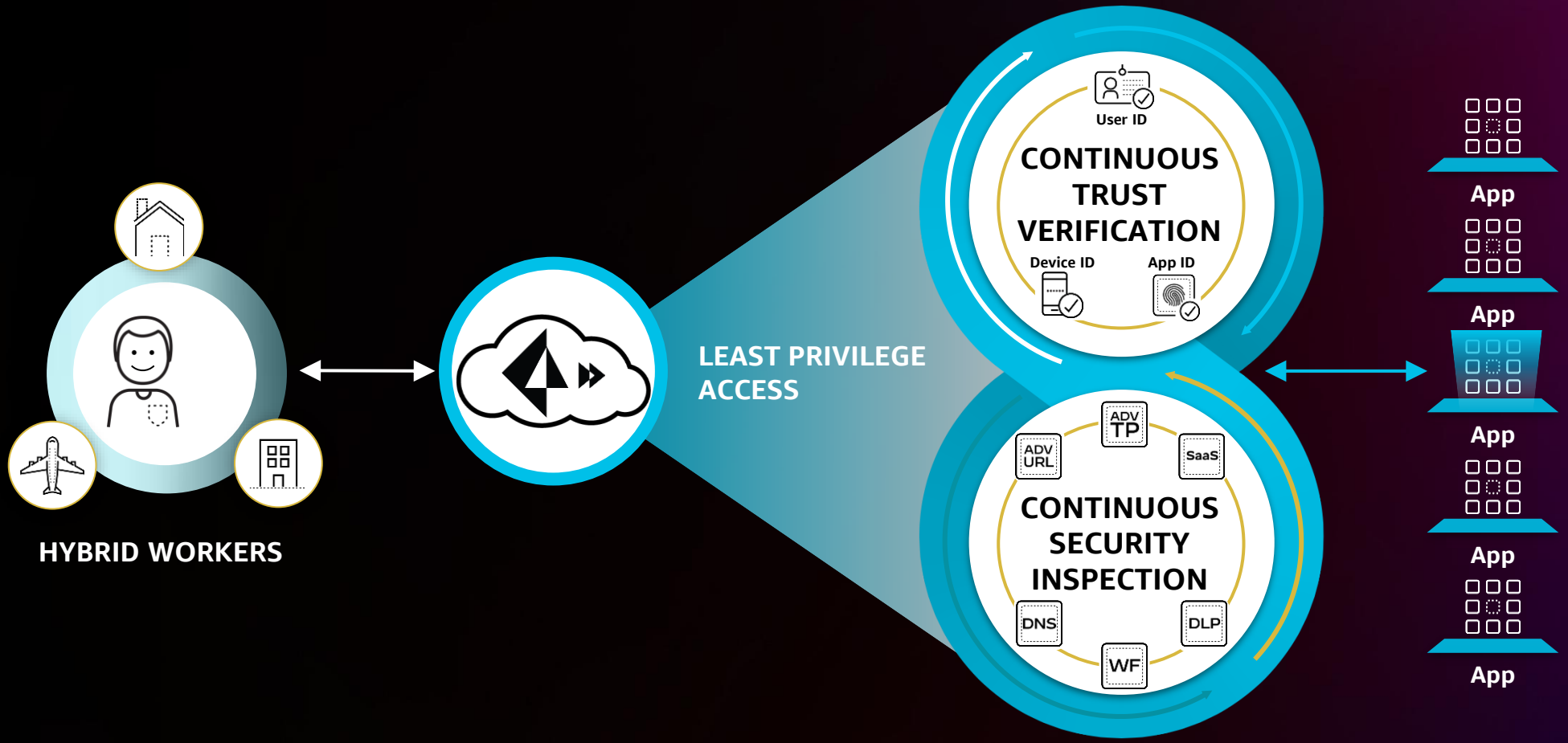
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Don’t allow and ignore



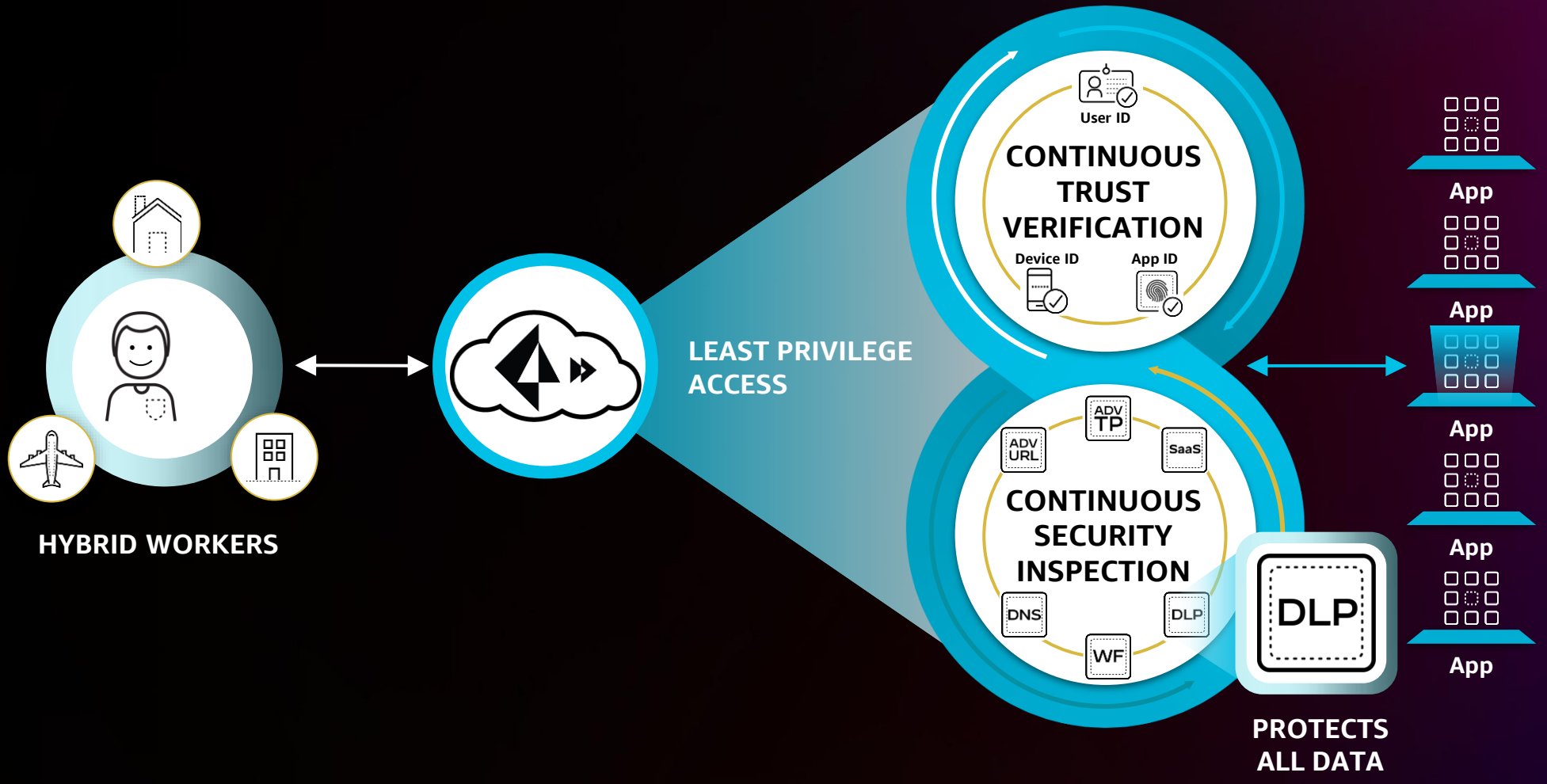
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Consistent security for all applications



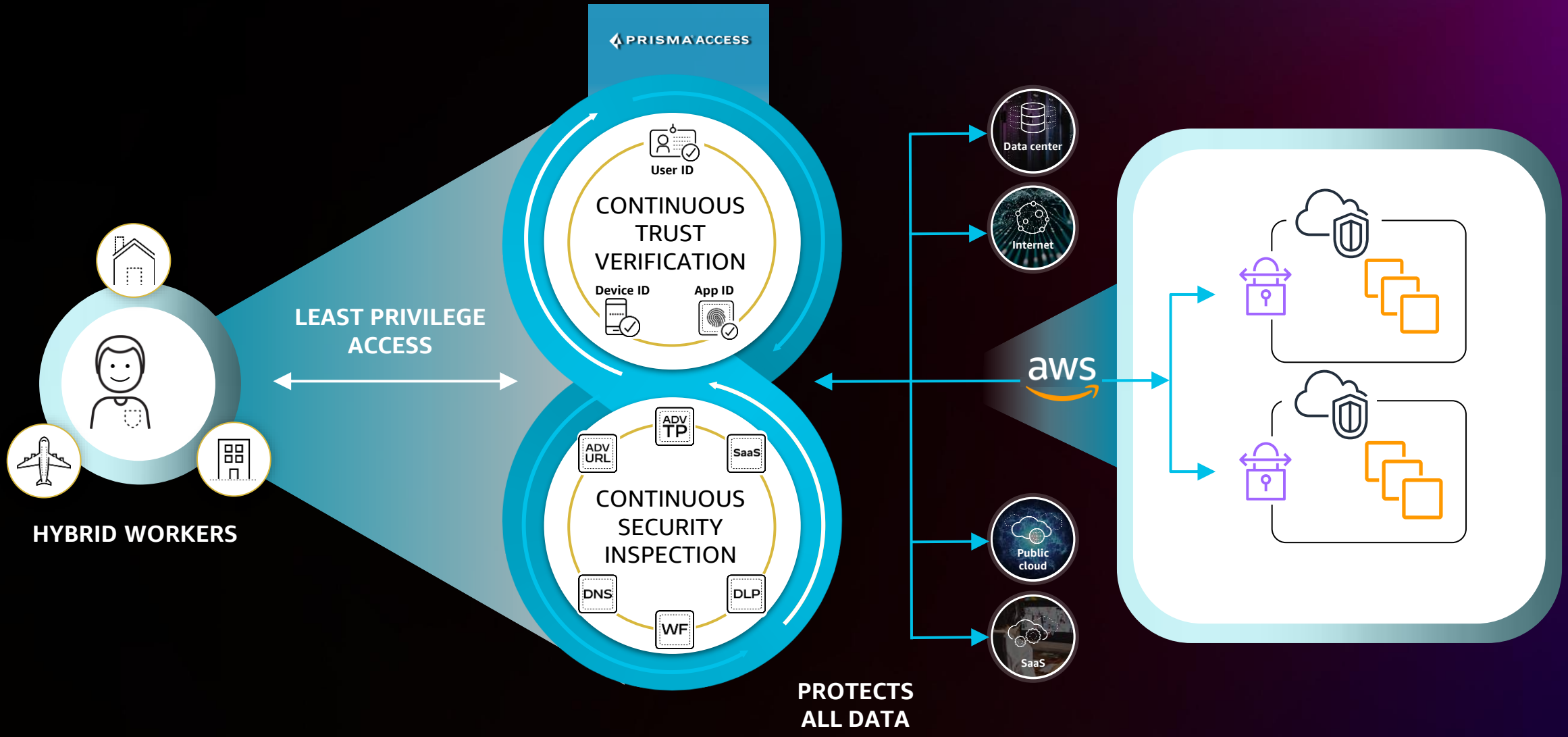
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Consistent protection for all types of data



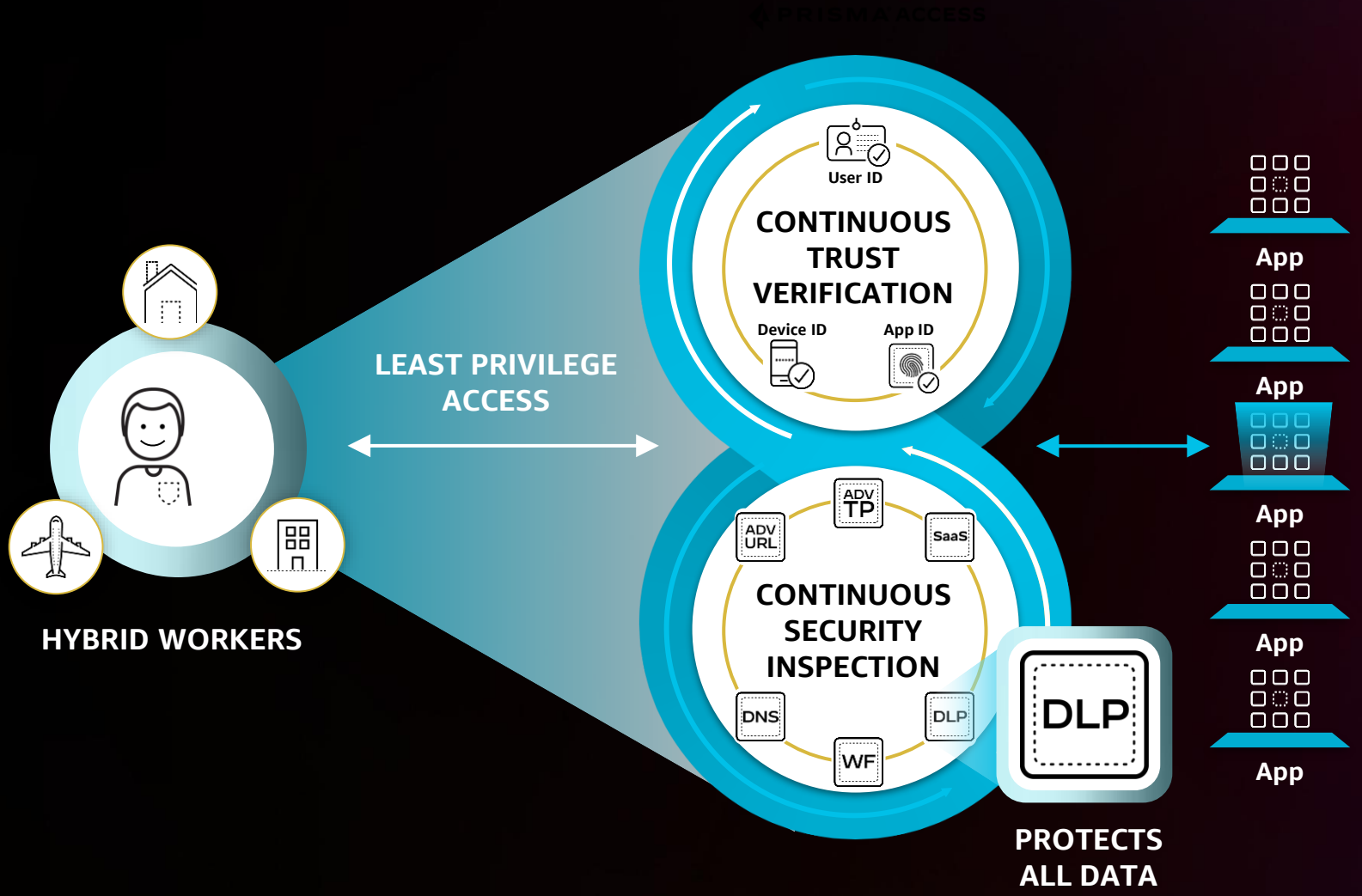
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Securing access to AWS with ZTNA 2.0



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ZTNA 2.0 protects today's hybrid workers and hybrid environments



- **True** least privilege access
- Continuous trust verification
- Continuous security inspection
- Protect all types of data
- Secures all types of applications

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