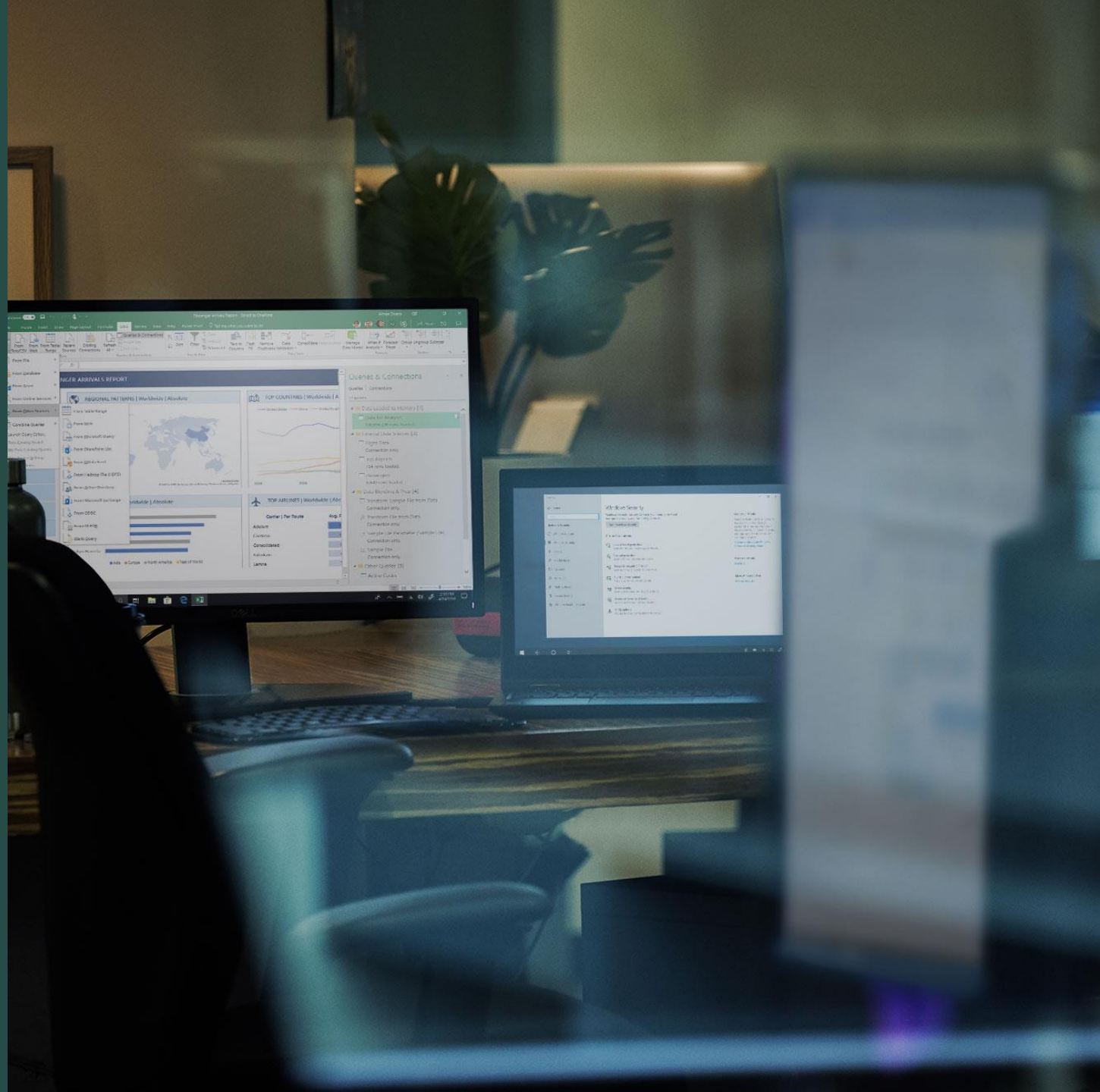




Supporting our customers during COVID-19

James Pearse
Tech for Social Impact



Problem statement

How is my IT infrastructure being stretched due to COVID-19?



How is my IT infrastructure being stretched due to COVID-19?



- **More people are working from home**
 - Licensing and scale considerations on existing remote-access solutions (On-Premises firewalls / gateways)
 - Managing authentication and identity for a large amount of remote-users
 - Corporate desktop environment not available at home
 - Saturation of existing DC/HQ Internet connectivity

How is my IT infrastructure being stretched due to COVID-19?

- **Some websites and applications are experiencing more traffic than usual**
 - Networking services such as firewalls and load balancers must handle larger than usual traffic volumes
 - Entire application stack must scale to meet increased demand
 - This applies to applications hosted On-Premises and inside Azure
 - This affects us all but some verticals such as healthcare and retail are affected more than others



Solutions

What Azure features and services can help in the current situation?

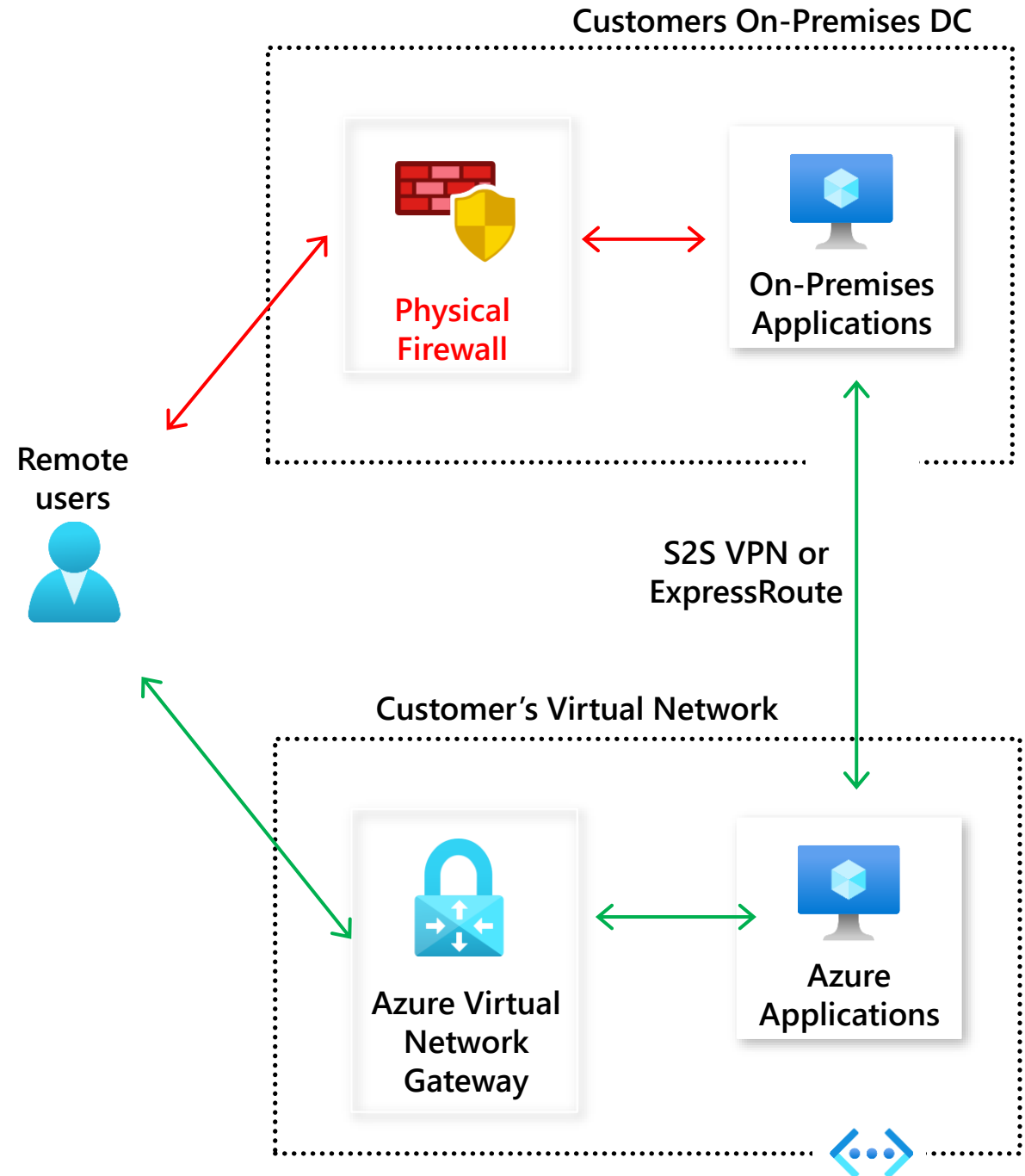




Azure Point-to-site VPN

Ease burden on existing remote access solutions

- Complement existing client VPN solutions and address scalability concerns
- Use cases apply to both *Azure Virtual Network Gateway* and *Azure Virtual WAN*, with some overlap
- Consider bandwidth on existing hybrid connection – ExpressRoute or S2S VPN
- Client-side application/protocol and identity/authentication require planning



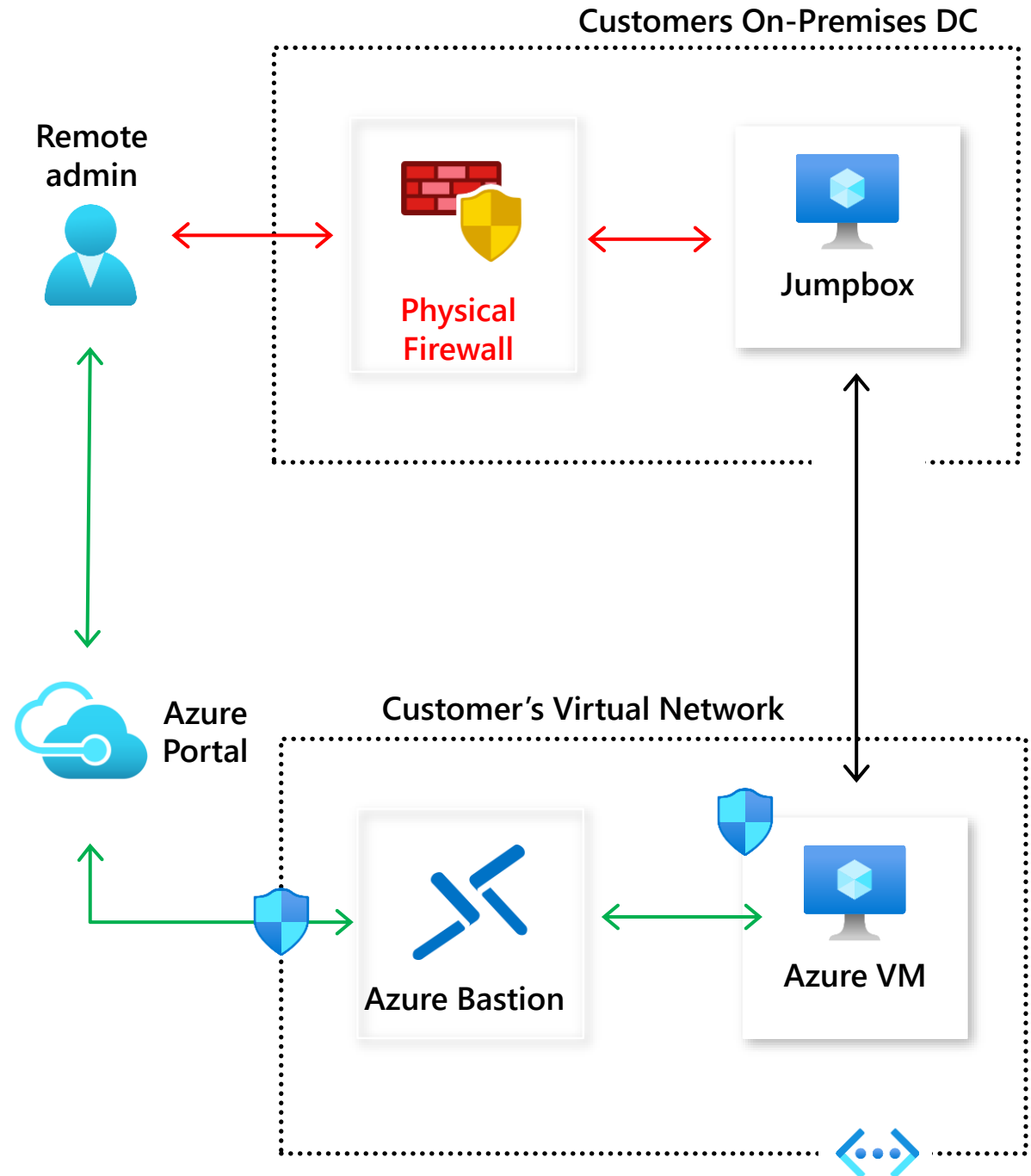


Azure Bastion

Ease burden on existing remote access solutions

GA

- GA availability was increased from 6 regions to 20 regions in February 2020
- Alternative solution to remote-VPN for administration of Azure Virtual Machines. Client agnostic, RDP/SSH via HTML5 in browser
- No agent required



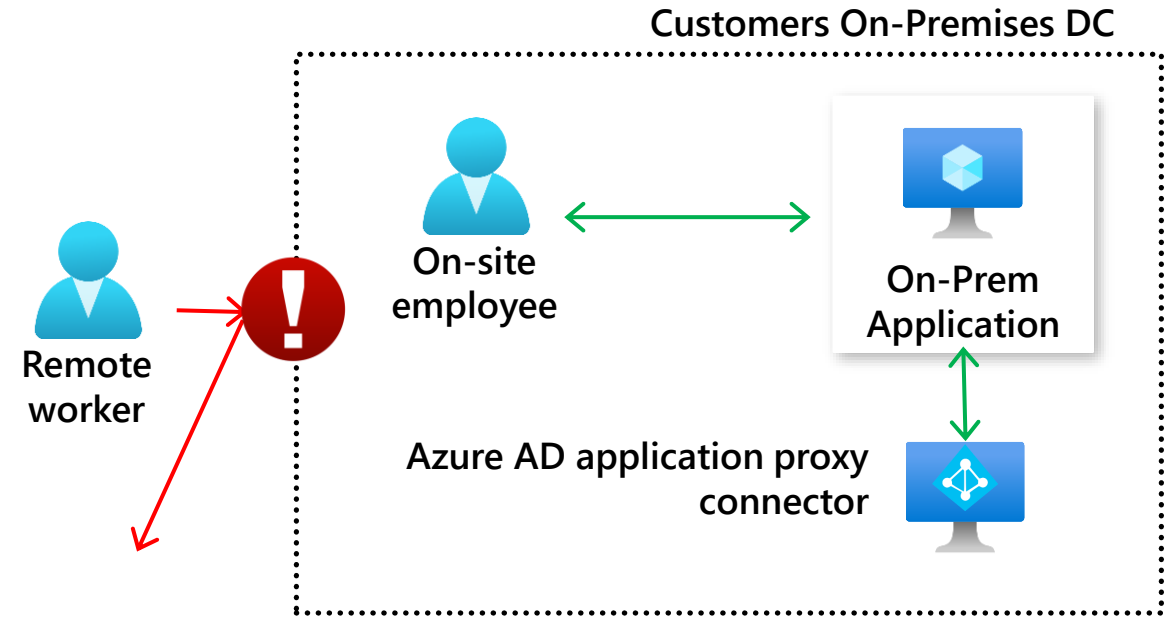


Azure AD Application Proxy

Make internal applications available to remote workers

GA

- Publish HTTPS applications without deploying a security edge
- Supports all AAD authentication features, including MFA and conditional access



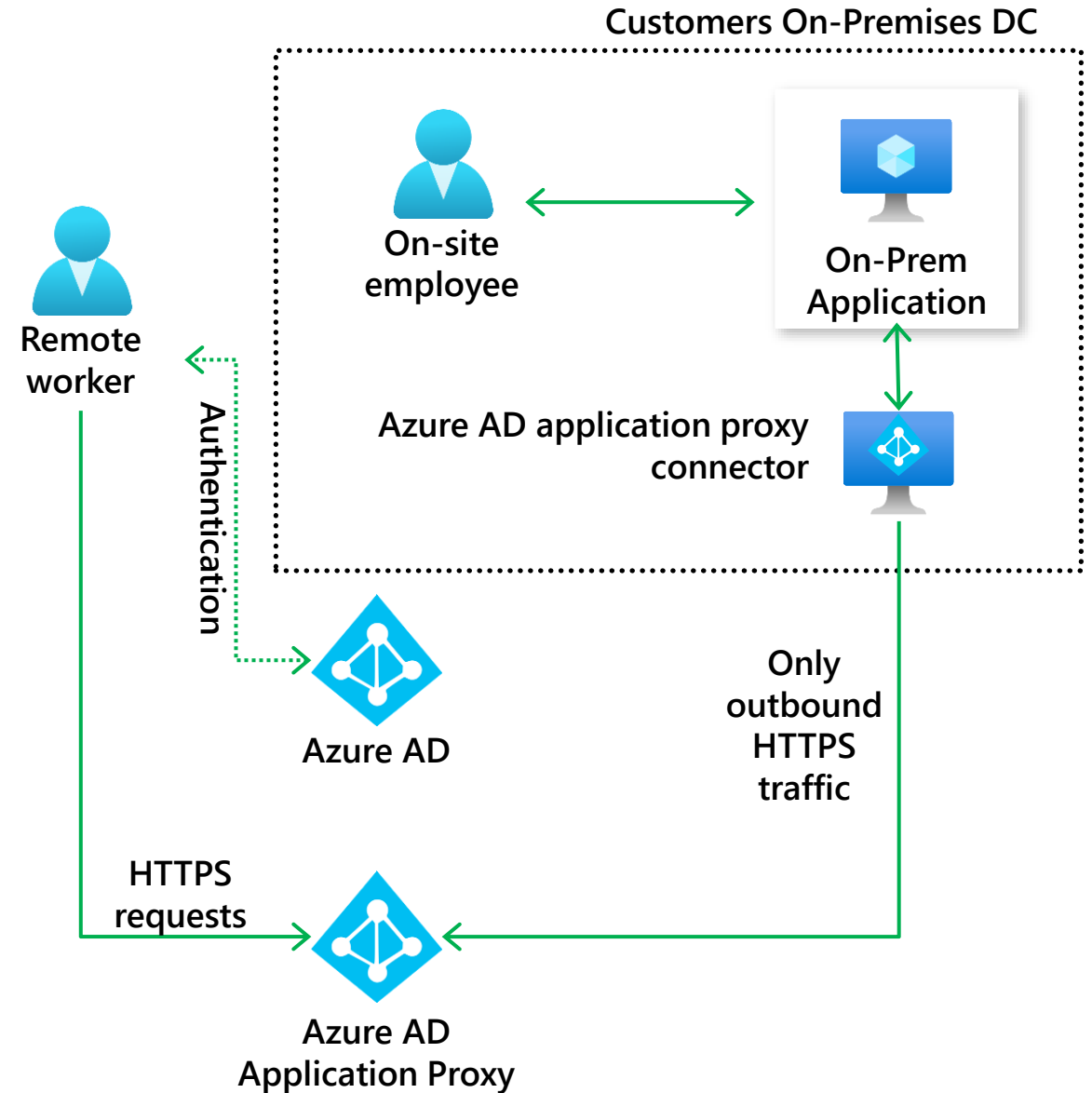


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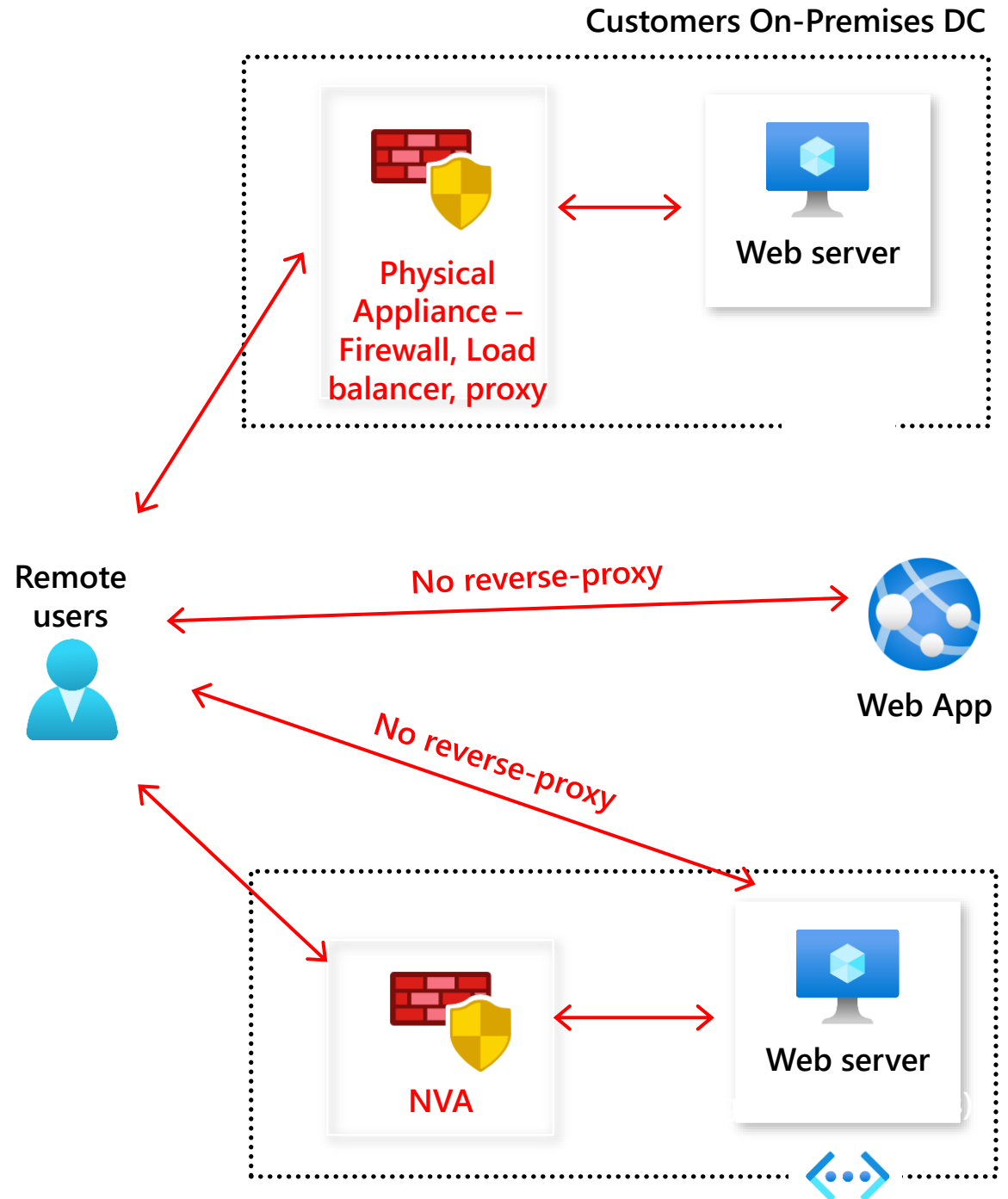




Azure Front Door and CDN

Reduce load on existing physical perimeter devices

- Help offload demand from existing web-facing IT infrastructure that may be overloaded or experiencing scaling issues
- Use Microsoft Edge locations to accelerate applications
- Make an existing regional application "go global"
- Applicable to On-Premises and Azure hosted applications
- Simple to implement and remove (using DNS changes), without re-architecting applications

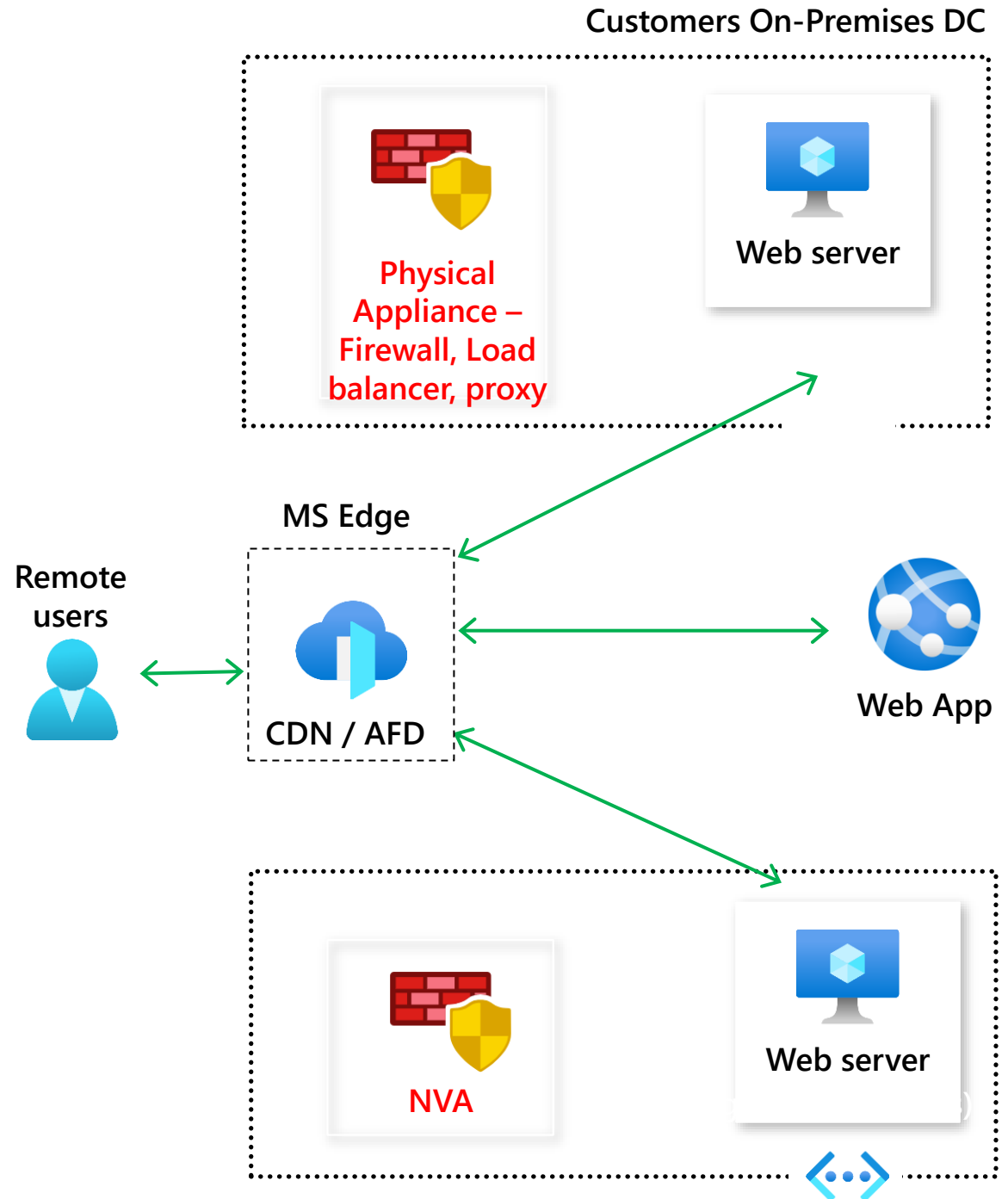




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Windows Virtual Desktop

Provide a corporate desktop experience while working from home

- Azure based Virtual Desktop solution. Results of screen output presented to user
- Can be accessed from anywhere, by any user, at anytime. One main use case is remote working anyway – now more relevant than ever
- Enables users to work from home and get access to a corporate desktop or applications, i.e. can do their day job
- Additional capacity is being deployed in popular regions, however, it is “competing with Teams”
- Available globally - WVD management planes exist in 15 Azure regions

