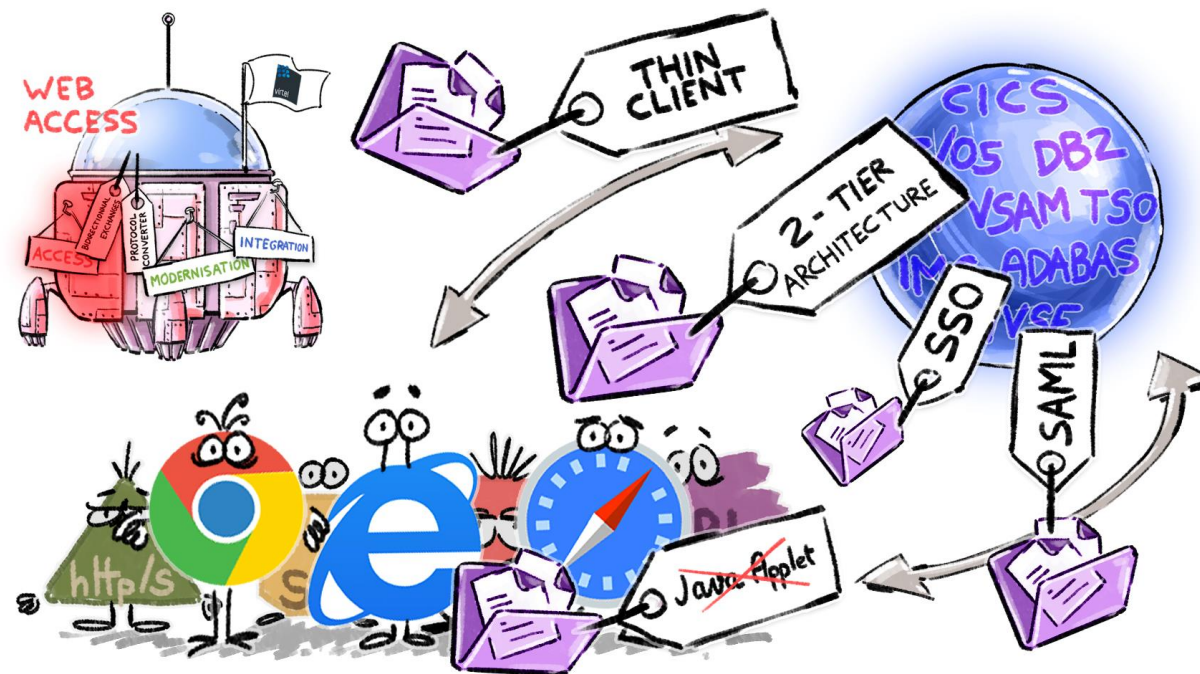


Migrate to a More Secure and Manageable 3270 TE Solution for the Future

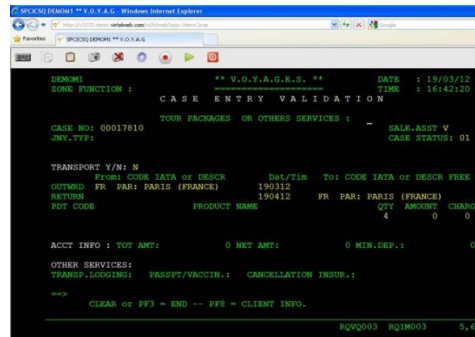
Virtel Web Access (VWA)



Thin-Client (Browser-Based)
3270 Terminal Emulation

What does VWA do?

- ❖ Serves 3270 screens (CICS, IMS, TSO, etc.)



As HTML5/JavaScript web pages
with 3270 emulation ergonomics

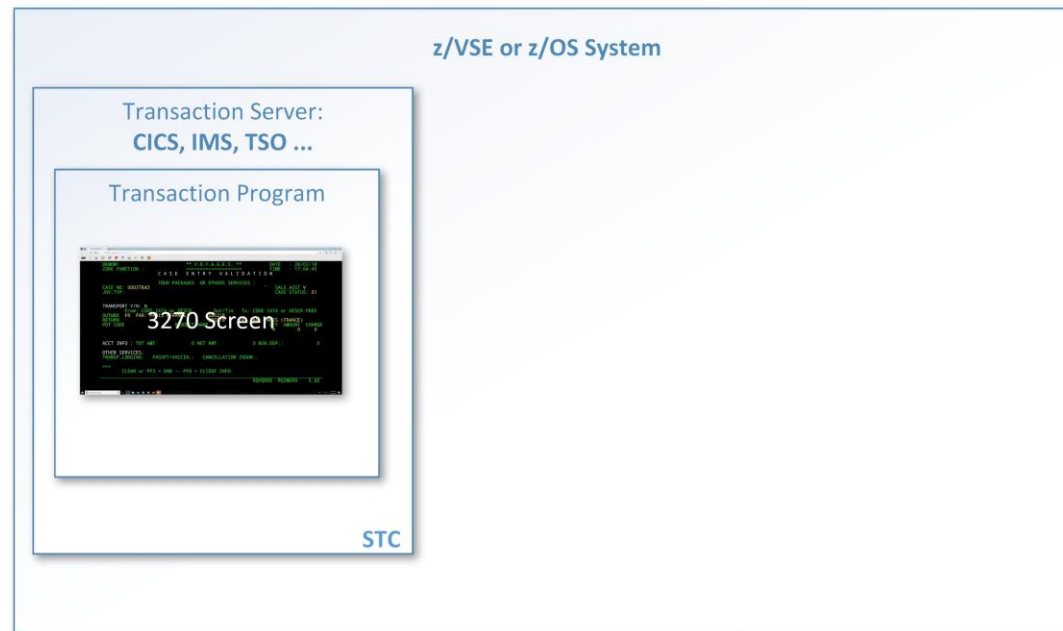


To thin clients straight off the
mainframe (no middle-tier servers)

- ❖ Replaces applet/plugin-based TN3270 emulators

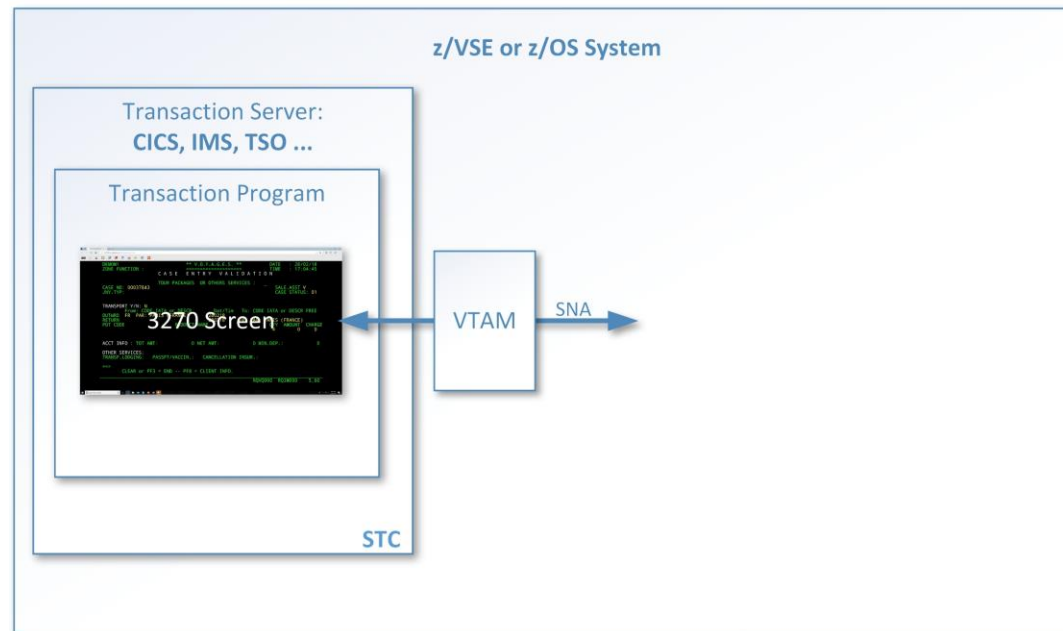
How Does VWA Work?

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Virtel Web Suite
Virtel Web Access
Virtel Web Modernization
Virtel Web Integration



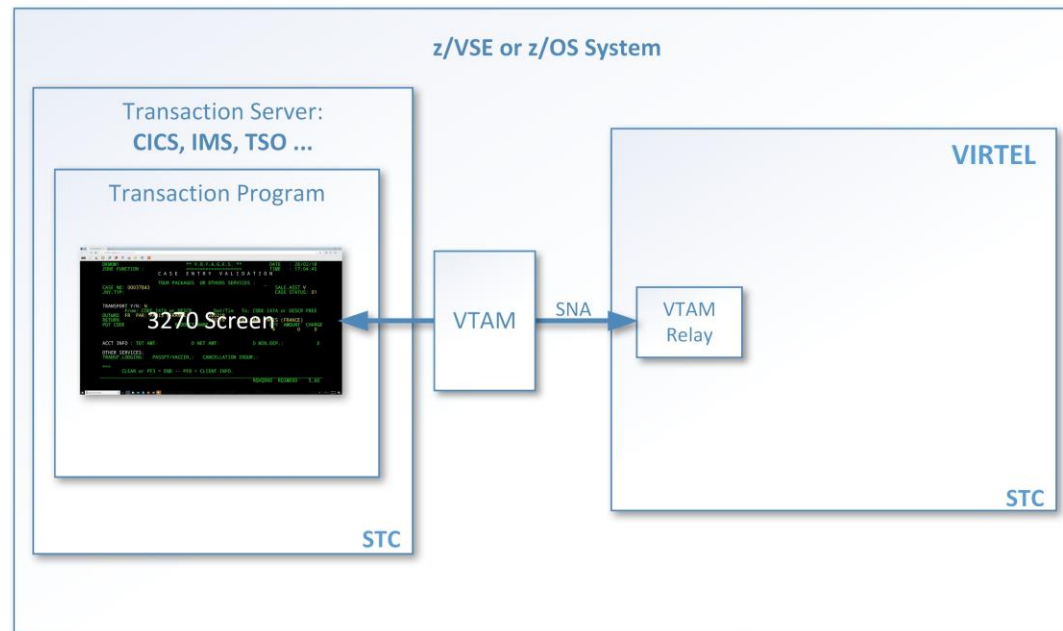
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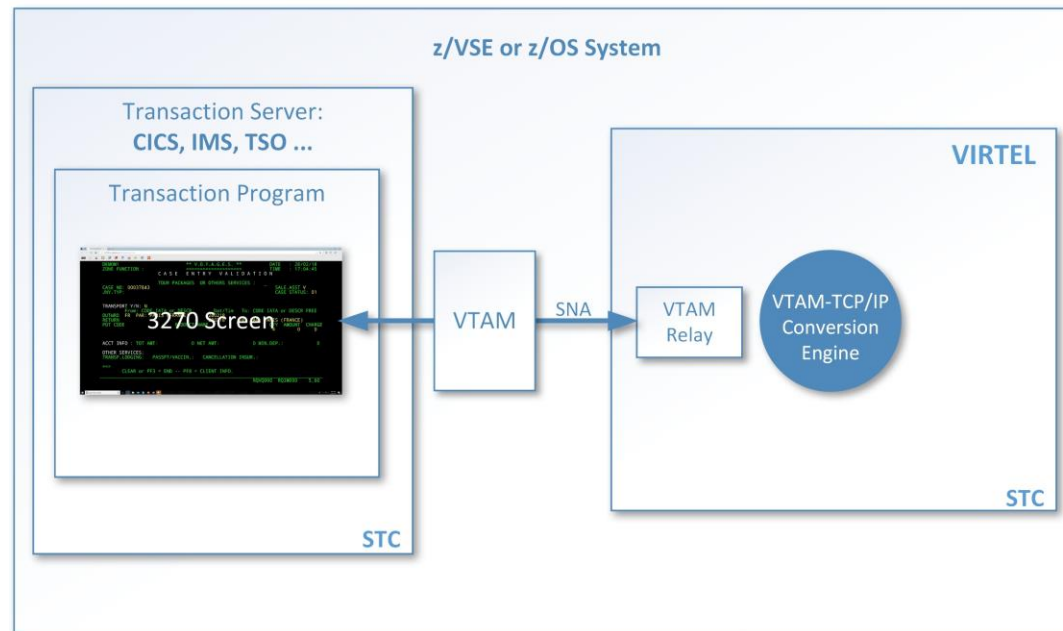
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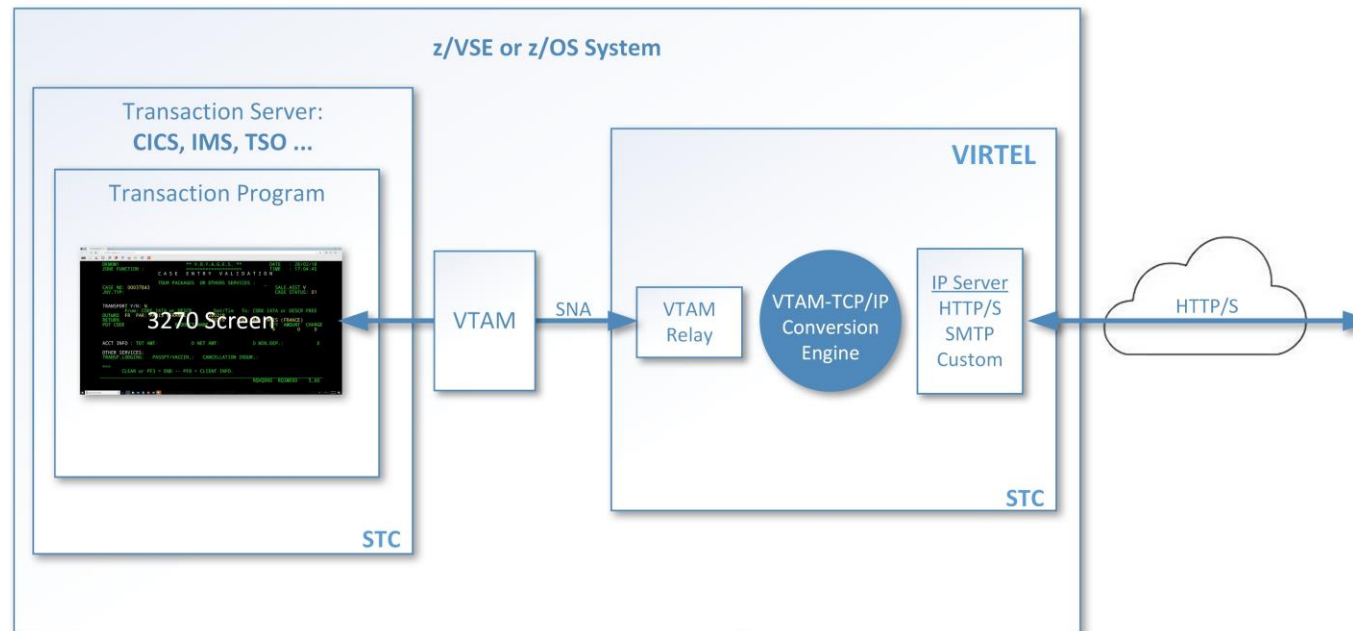
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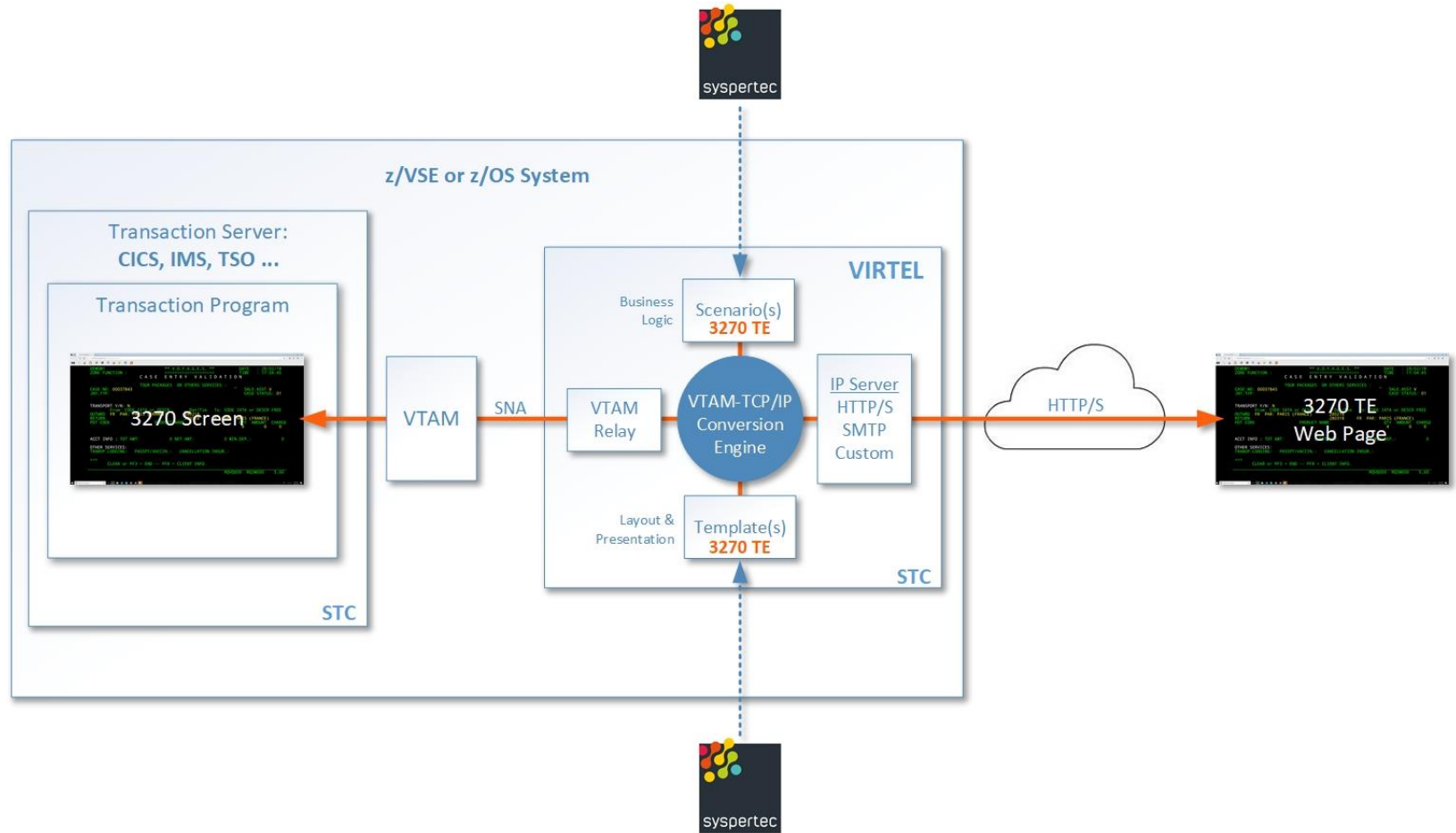
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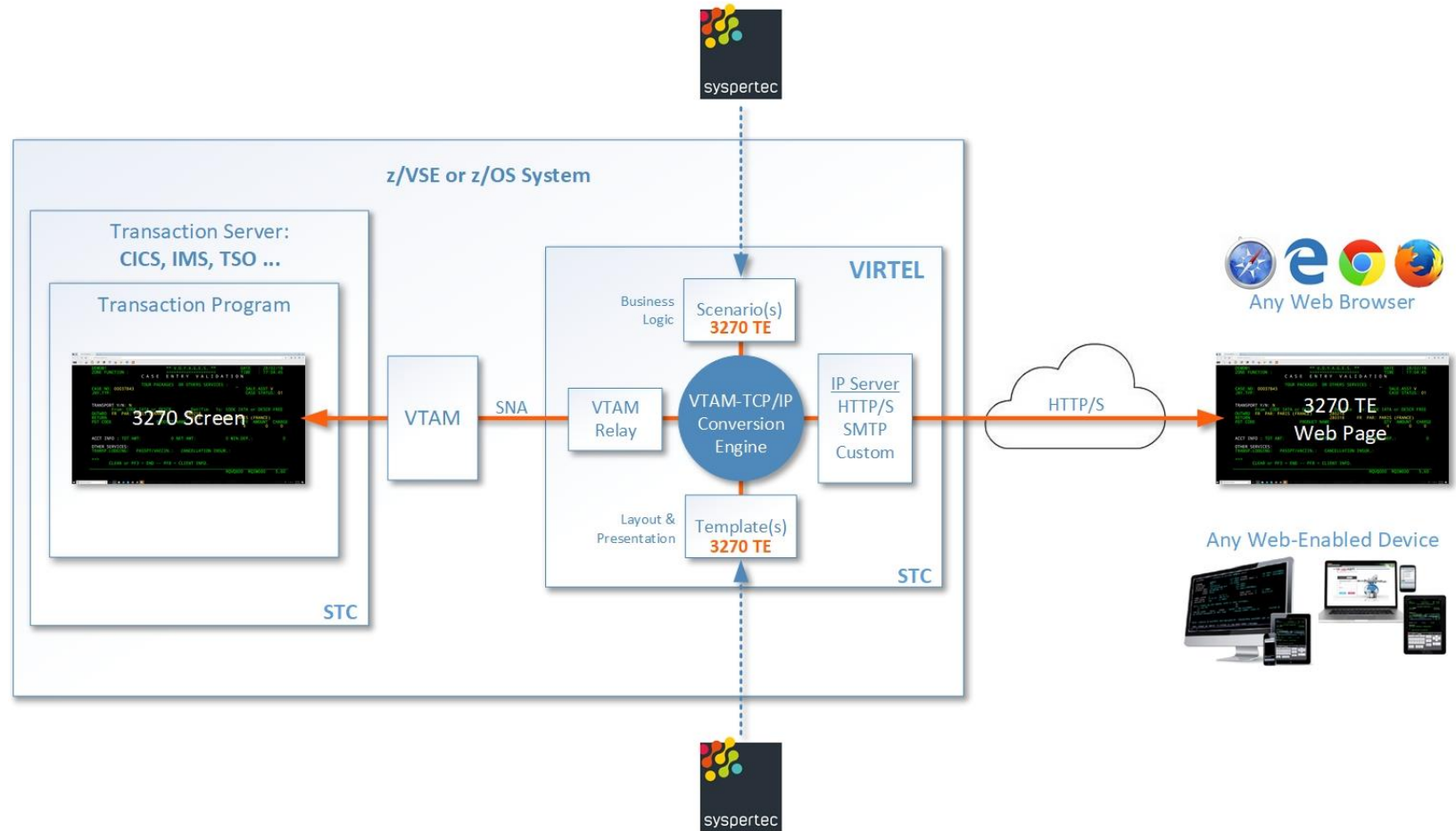
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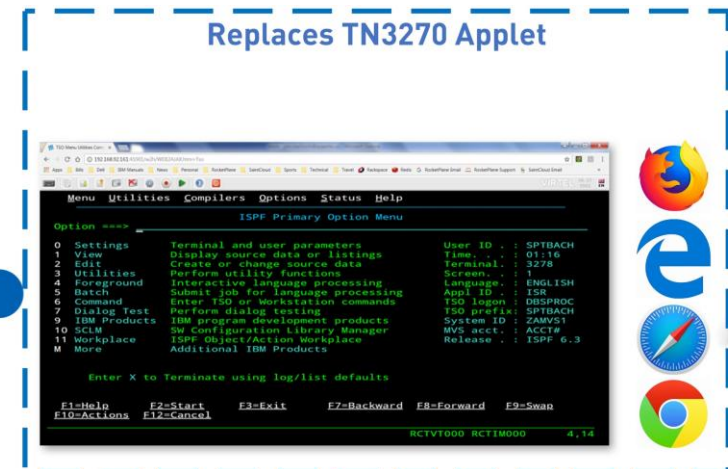
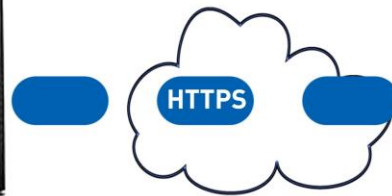


How Does VWA Work?

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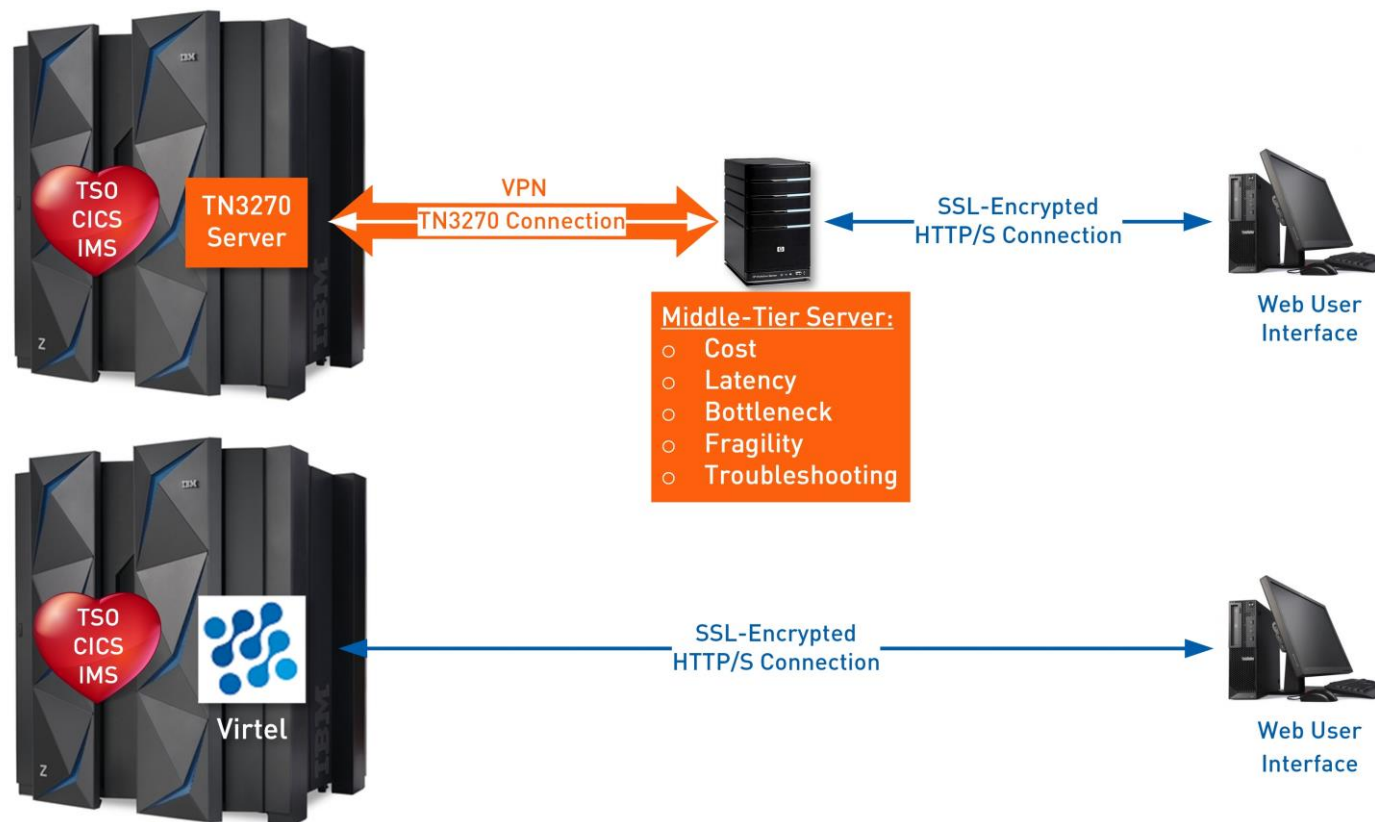
How Does It Replace TN3270 Emulators?



❖ Replaces:

- TN3270 connections with HTTP/S connections
- TN3270 emulation applets with 3270 TE webpages

No Middle-Tier Server



... since the majority of [us] have to telework, we started to tax our VPN network. A lot of my colleagues prefer using Virtel as opposed to BlueZone T.E. since Virtel doesn't have to traverse across the network as much, so the response time is much faster. (U.S. Federal Government Department)

Simpler Admin/Support

- ❖ Simpler installation-administration-support
 - Centralized
 - Nothing to install-admin-support on remote clients
 - No Java
 - No applets or plugins
- ❖ Simpler deployment
 - Point browser to installation-defined URL/port
- ❖ Frees support staff for more creative tasks
- ❖ Eliminates reliance on desktop support team
- ❖ Reduced support costs → reduced TCO



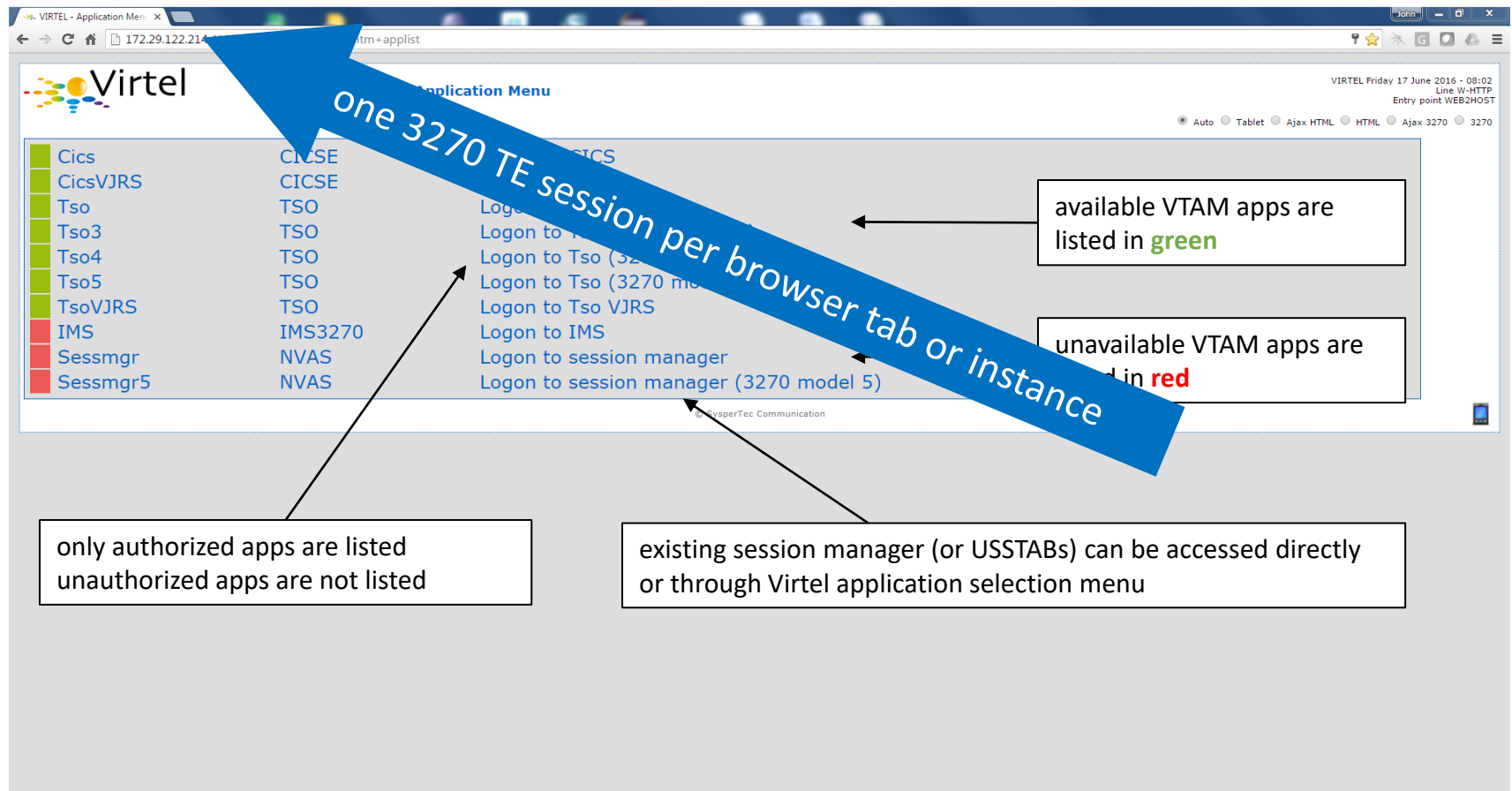
BYOD Compatibility



- ❖ Supports any 3270 TE client technology
 - Including mobile devices
- ❖ MF-hosted 3270 TE user settings & macros

Also Works as Session Manager

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The screenshot shows the Virtel Application Menu interface. A large blue diagonal arrow points across the menu with the text: "one 3270 TE session per browser tab or instance".

Annotations on the right side of the menu:

- available VTAM apps are listed in **green**
- unavailable VTAM apps are listed in **red**

Annotations at the bottom of the menu:

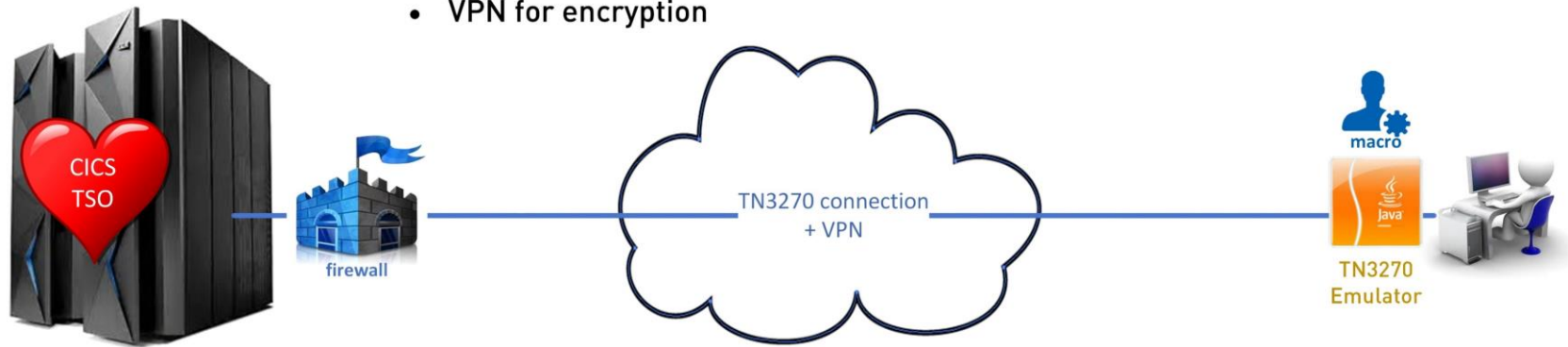
- only authorized apps are listed
unauthorized apps are not listed
- existing session manager (or USSTABs) can be accessed directly
or through Virtel application selection menu

The application menu lists the following items:

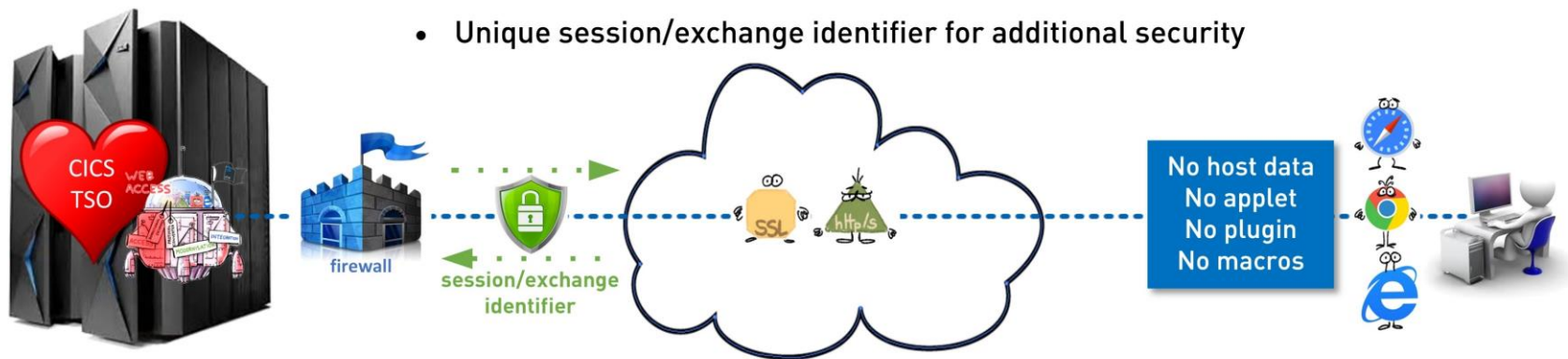
Item	Category	Link
Cics	CICSE	Logon to CICS
CicsVJRS	CICSE	Logon to CicsVJRS
Tso	TSO	Logon to Tso
Tso3	TSO	Logon to Tso (3270 model 5)
Tso4	TSO	Logon to Tso (3270 model 5)
Tso5	TSO	Logon to Tso VJRS
TsoVJRS	TSO	Logon to Tso VJRS
IMS	IMS3270	Logon to IMS
Sessmgr	NVAS	Logon to session manager
Sessmgr5	NVAS	Logon to session manager (3270 model 5)

Secure Web Access

- Unencrypted TN3270 connections
- VPN for encryption

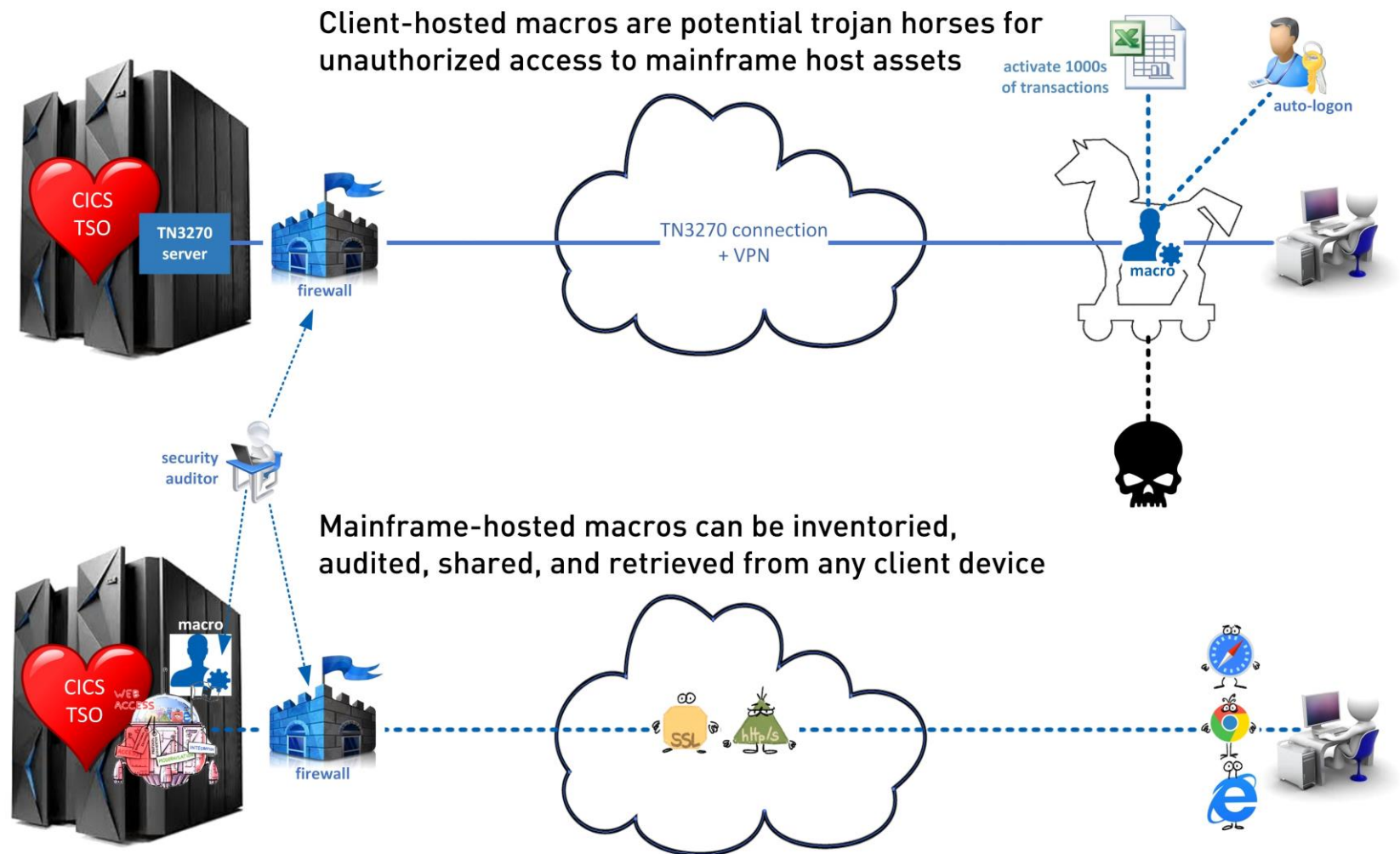


- End-to-end SSL-encrypted HTTPS connections
- Encryption performed by IBM AT-TLS or ICSF
- FIPS 140.2 + TLS 1.2/1.3 + IPv6/IPv4 compliant
- Don't need VPN for encryption
- Unique session/exchange identifier for additional security



Mainframe-Hosted Macros

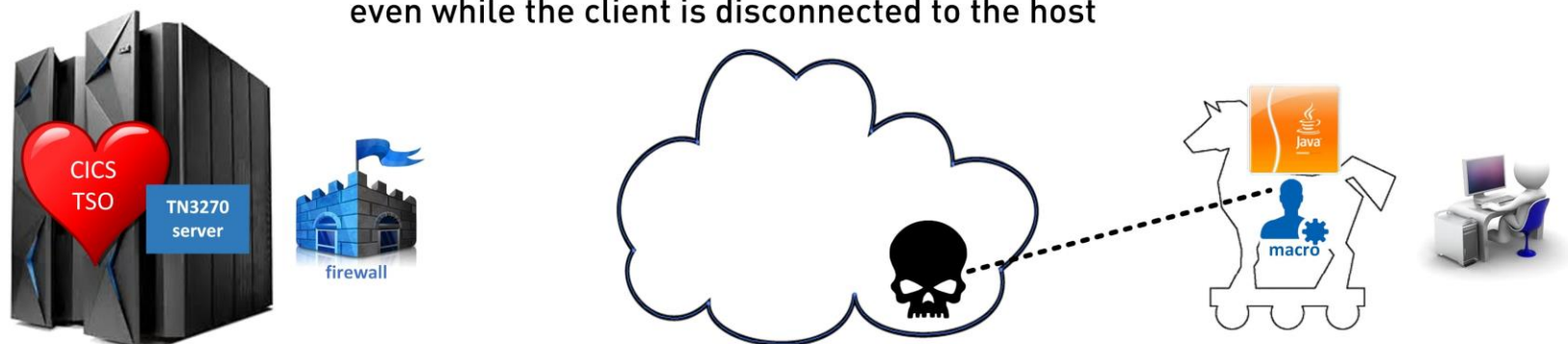
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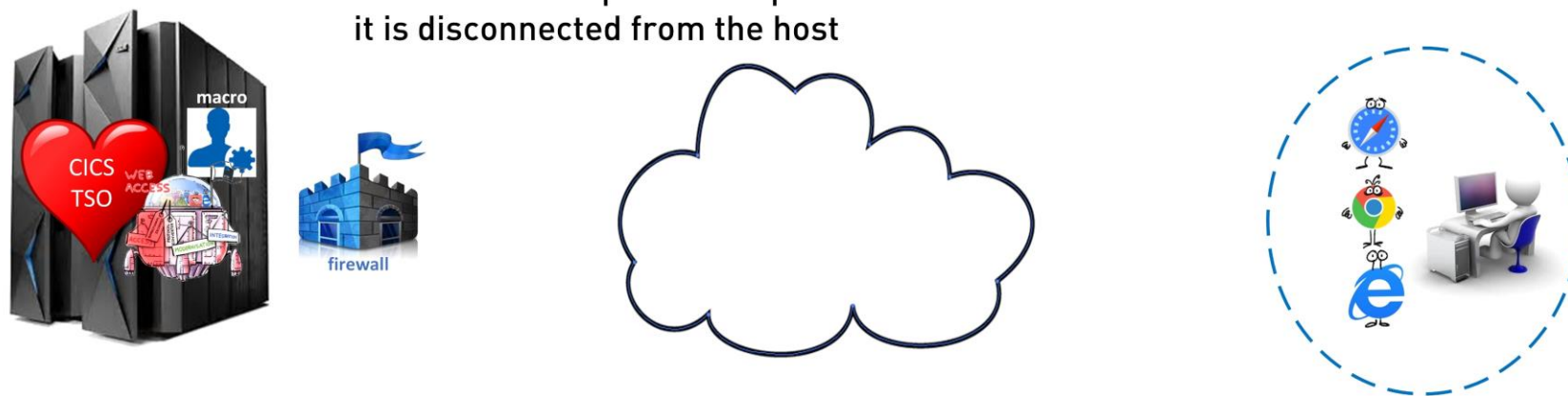
Disconnected Clients

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Virtel Web Integration

TN3270 emulation applets and macros are exposed even while the client is disconnected to the host

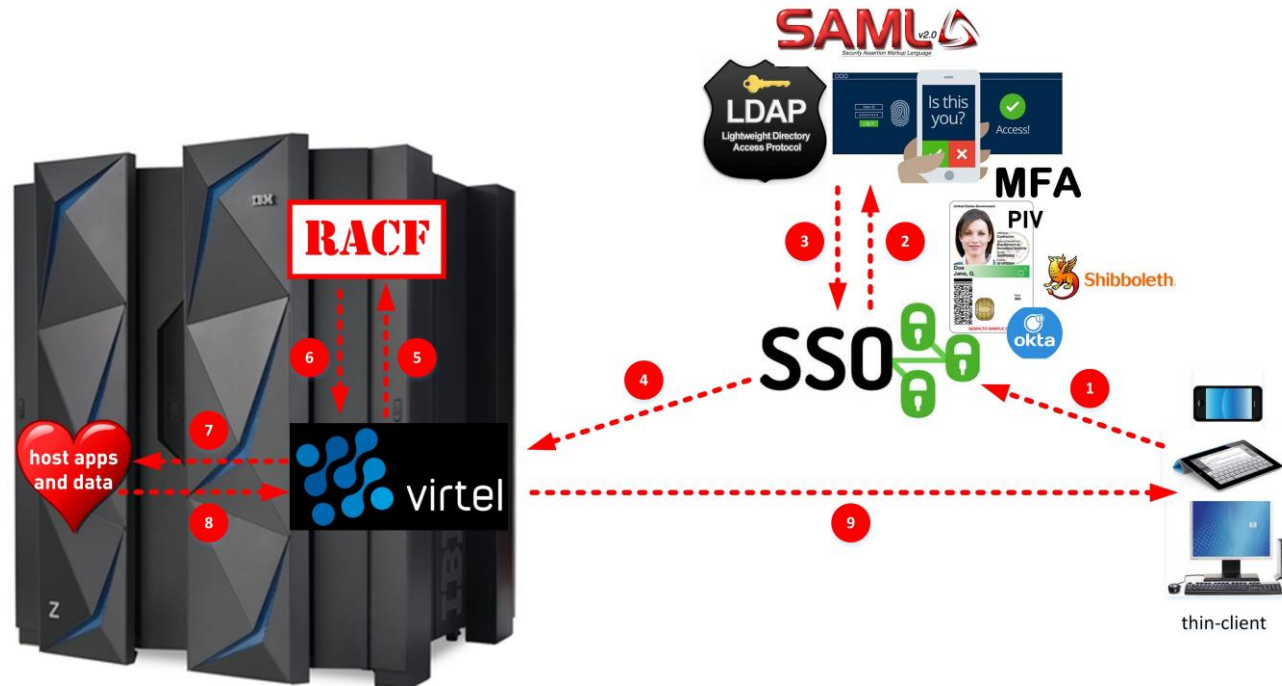


No 3270 TE components exposed on the client while it is disconnected from the host



SSO/MFA Integration

- 1 End-user requests data/screen access to SSO
- 2-3 SSO gets SAML token from MFA service
- 4 Virtel receives authenticated request from authenticated (certificate + IP address) server
- 5-6 Virtel gets PassTicket from RACF for onetime access to data/screen
- 7-8 Virtel uses PassTicket to get data/screen from host application
- 9 Virtel sends requested data/screen back to end-user



VWA – Customer Story

- ❖ Eliminated SNA network in 2003
- ❖ 400K users in 150 countries
- ❖ No Java-applets-plugins
 - Support any web-enabled client device
 - Reduced admin/support → low TCO
- ❖ High performance/scalability
 - 16K concurrent users per product instance
 - Sub-second response time
- ❖ Integrated DBCS/Unicode conversion
 - Japan, China, Russia ...

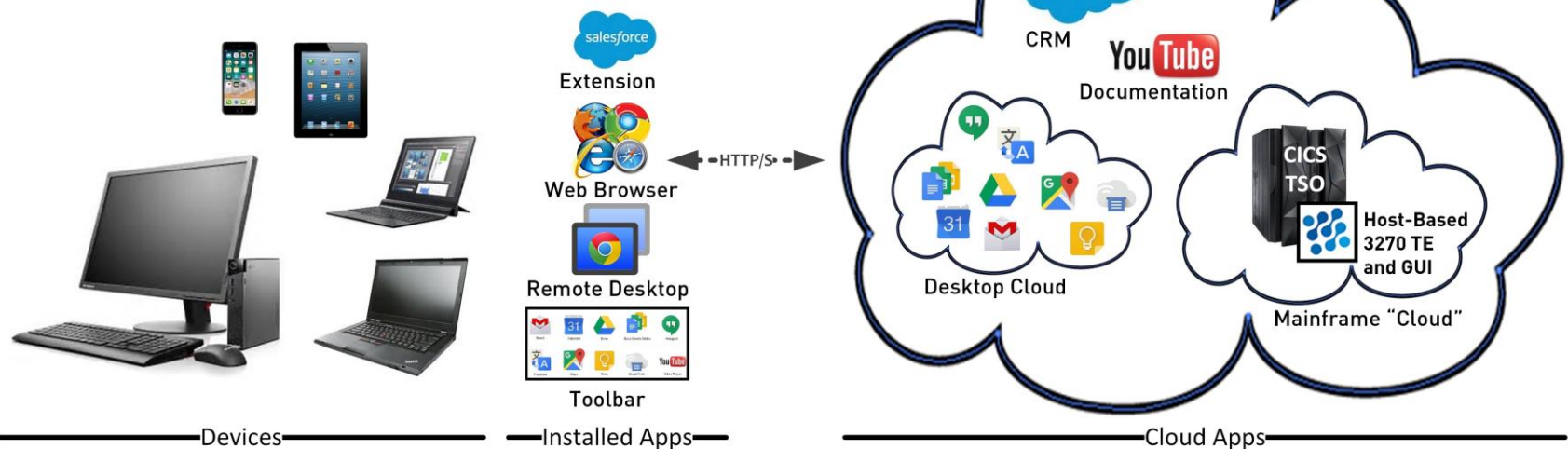


VWA – Customer Story

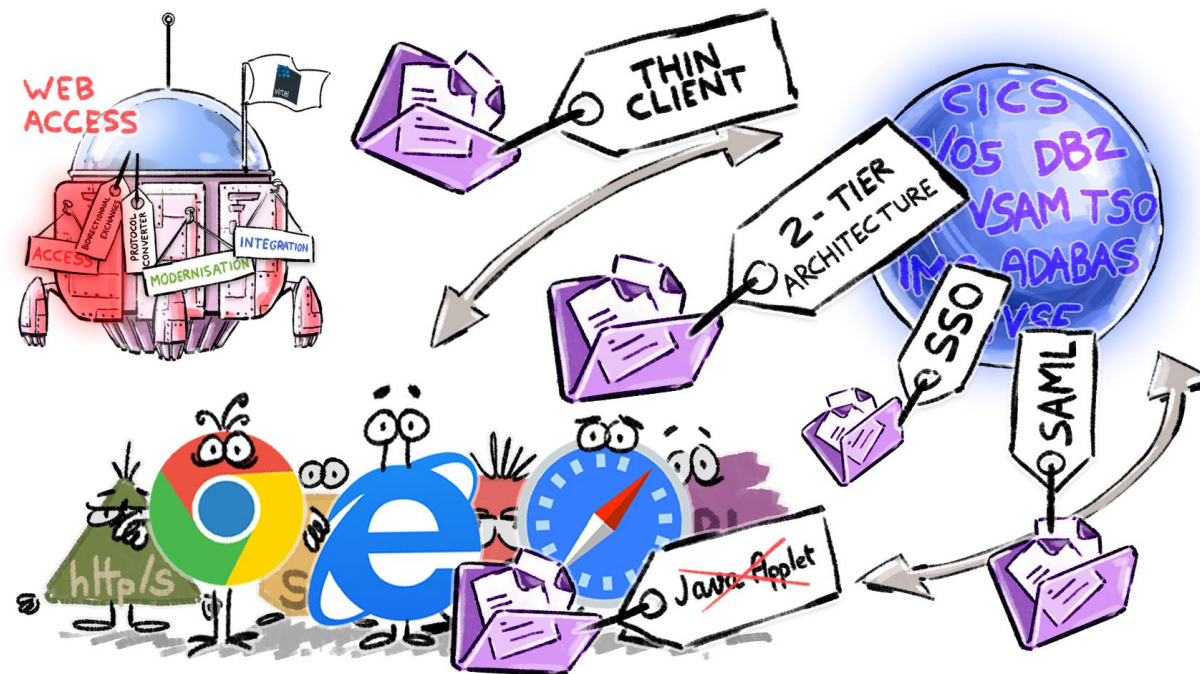
- ❖ Ultralight client devices
- ❖ All apps in Cloud
 - Desktop, CRM, documentation ...
 - CICS, TSO ...
- ❖ All apps accessed via browser



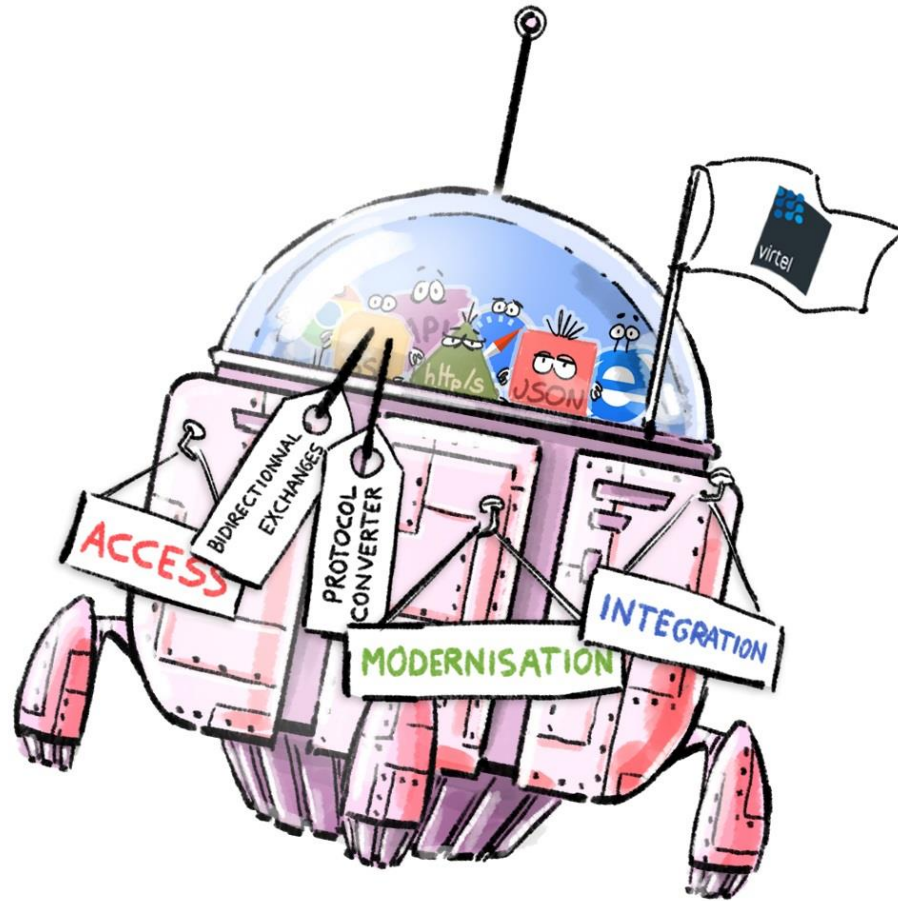
IBM Systems Magazine July/August 2018



Virtel Web Access (VWA)



Demonstration



Any Questions?

info@sdsusa.com