



CHALLENGE EVERYTHING

*NVIDIA, Citrix & IGEL for
Unified Communications in VDI*

March 21, 2019



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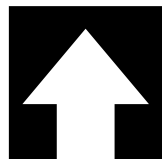
*In life, some things
are inevitable:*



Death



Taxes



Windows Upgrades



Windows 10 in the news

New Windows 10 build is a monster update

First update of the year adds more new features than any previous build.

[-COMPUTERWORLD](#)

Massive Windows Insider build finally adds Timeline and Sets, revamps My People and more

This looks like the first massive feature update of the Redstone 4 cycle for Microsoft's Windows 10.

[-PCWorld](#)

Windows 10 April 2018 Update biggest problems and complaints

The April 2018 Update is yet another big refresh for Windows 10, but it's causing headaches for some users.

[-Windows Central](#)

Massive Windows 10 Upgrade Has A Bigger Omission

[-Forbes](#)

WINDOWS ON THE DESKTOP

Seven versions of Windows 10 to date

Windows 10 History

Date of Availability

End of Service

Windows 10, version 1809

November 14, 2018

May 11, 2021

Windows 10, version 1808

October 9, 2018

Withdrawn

Windows 10, version 1803

April 11, 2018

November 10, 2020

Windows 10, version 1709

September 12, 2017

April 14, 2020

Windows 10, version 1703

April 11, 2017

October 8, 2019

Windows 10, version 1607

July 29, 2016

April 9, 2019

Windows 10, version 1511

November 15, 2015

October 10, 2017

Windows 10, version 1507

July 29, 2015

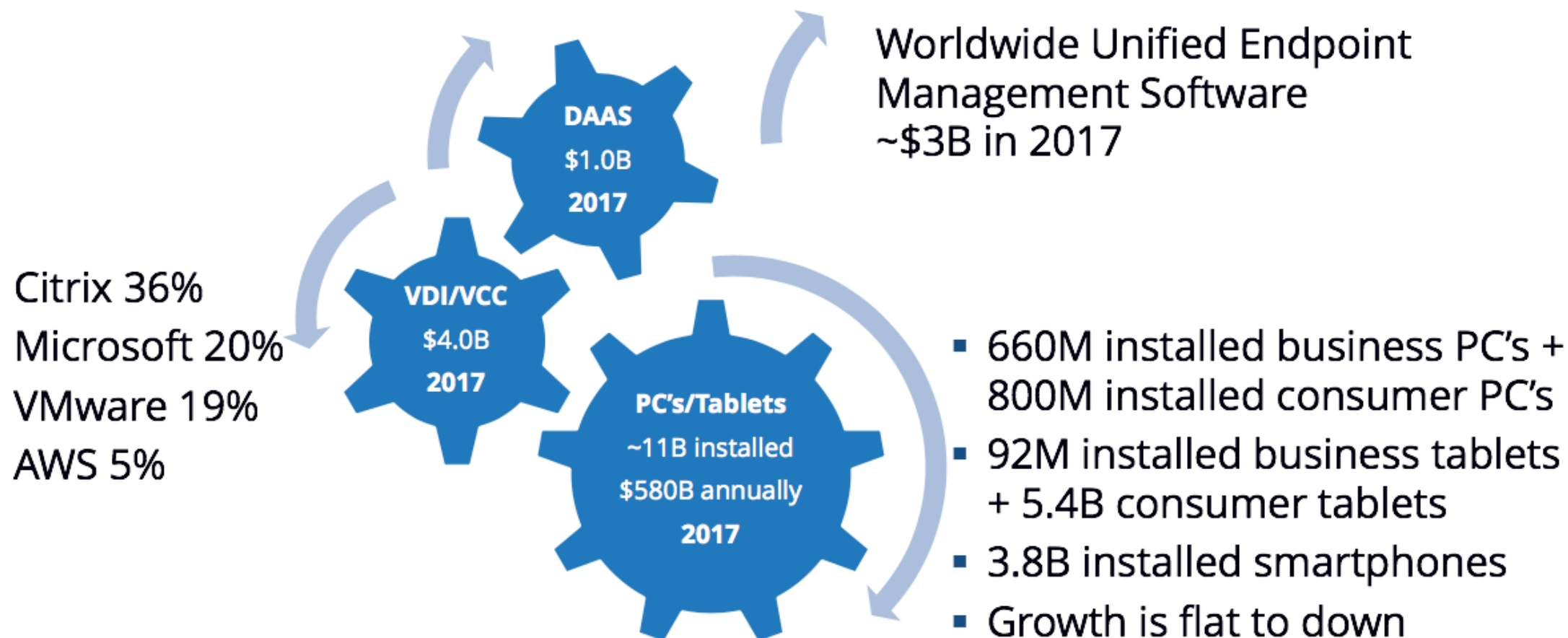
May 9, 2017

166
Builds

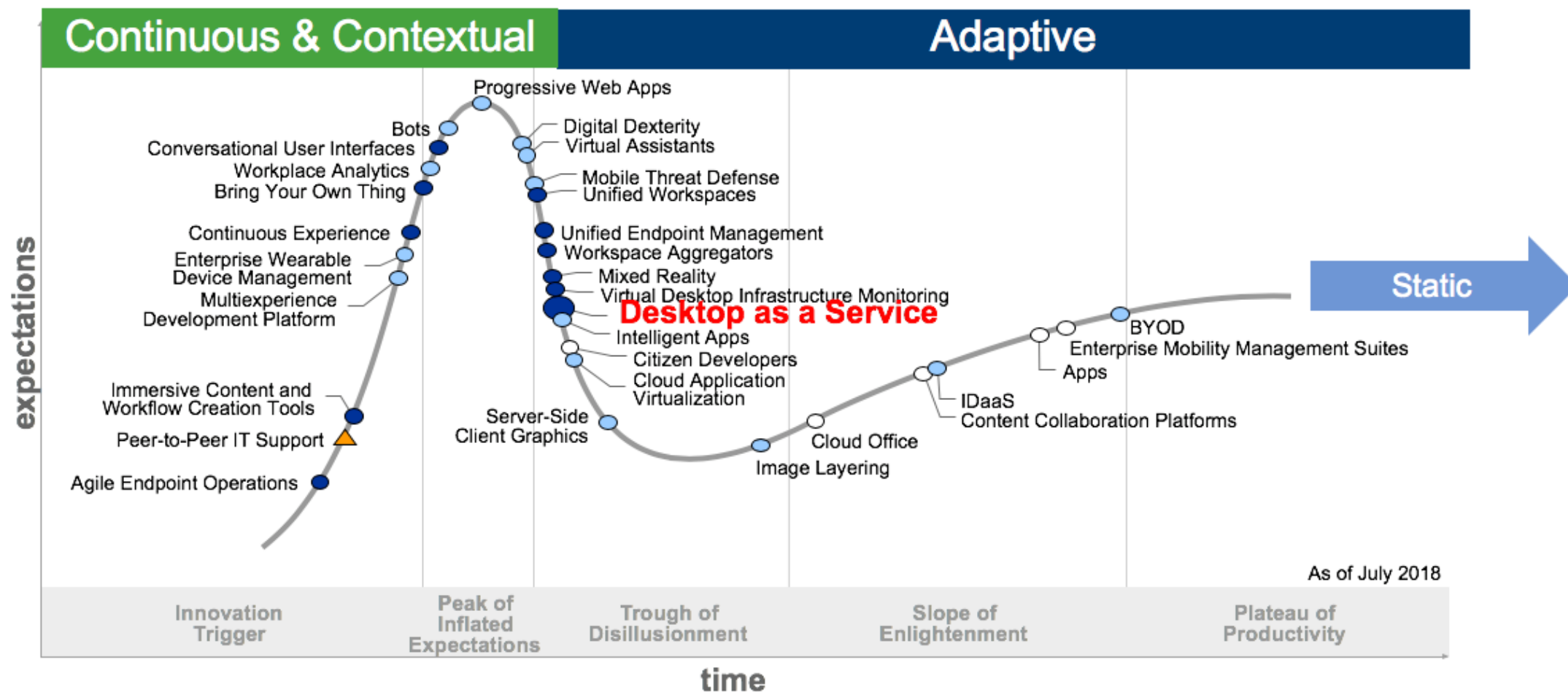
<https://support.microsoft.com/en-us/help/13853/windows-lifecycle-fact-sheet>

Evolving Hybrid End-User Computing Landscape

From Hardware to Software to Services for Management & Security



Hype Cycle for Unified Workspaces, 2018



Plateau will be reached:

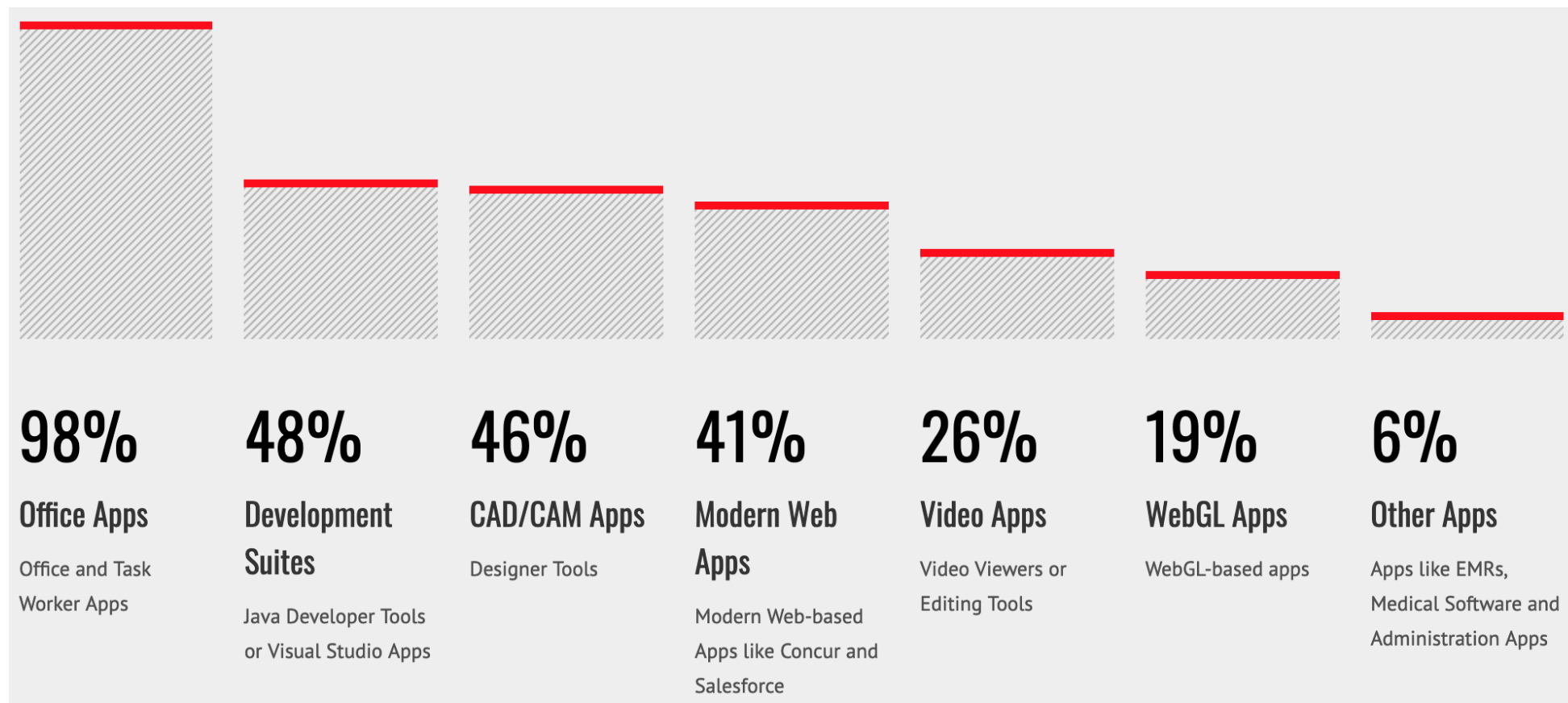
○ less than 2 years ● 2 to 5 years ● 5 to 10 years ▲ more than 10 years ⊗ obsolete before plateau

From "Hype Cycle for Unified Workspaces, 2018," 25 July 2018 (G00340208)

Gartner

2019 “YEAR OF VDI” SURVEY RESULTS

Applications are the main reason for organization to move towards VDI:



Source: <https://theyearofvdi.com/>

Copyright: Johan van Amersfoort, <https://vHojan.nl>

LINUX

CLOUD & VDI ENDPOINTS

“ Our research indicates two things: Thin Client sales will grow faster than PC sales. And, among Thin Clients, Linux will grow faster than Windows.”



ALEC GEFRIDES, INTEL
Thin Client Segment Leader

IDC on Endpoint Device OS:

TC OS	2018 Unit Shipments	Market Share	Growth '17 to '18
Linux	1,852,424	37.0%	13.4%
Other	565,487	11.0%	36.8%
Windows	1,691,765	33.0%	-6.4%
No OS	1,000,000	20.0%	-
Total	4,889,136	100.0%	4.9%

2018 Linux
overtakes
Windows

VDI

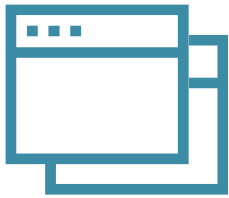
The Cure for
Windows 10
on the Desktop





*Citrix, NVIDIA & IGEL
delivering a superior
Windows 10 Desktop:
Office Applications &
Unified Communications*

What's the solution: end user productivity requires:



Application
Availability



Performance



A Secure
Endpoint

Desktop Primary Applications:



ACCELERATE PRODUCTIVITY

For Every User, Any App



Knowledge
Worker

Providing business users the highest level of experience for all their apps on any device



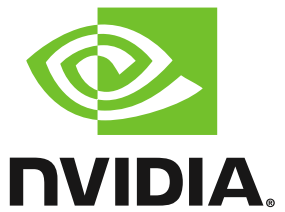
Creative & Technical
Professional

Uncompromised experience for professional graphics users allowing them to design on the go



Scalability

Performance

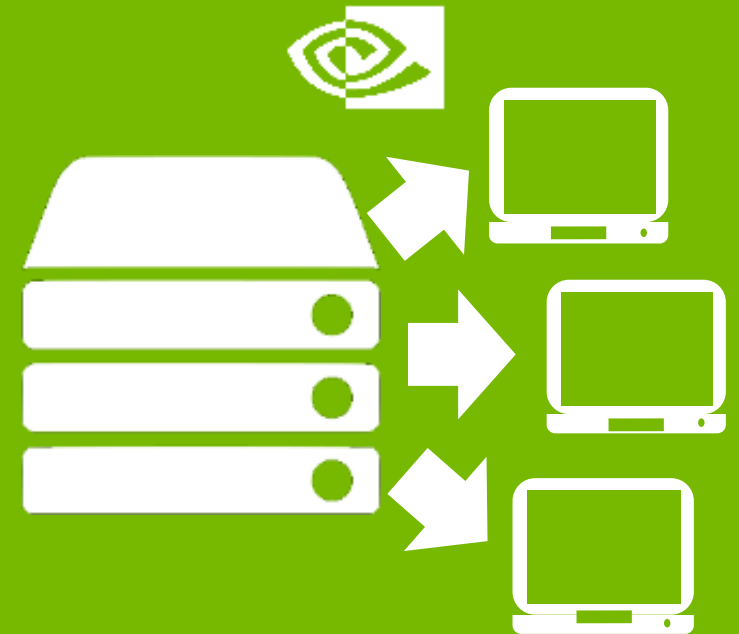
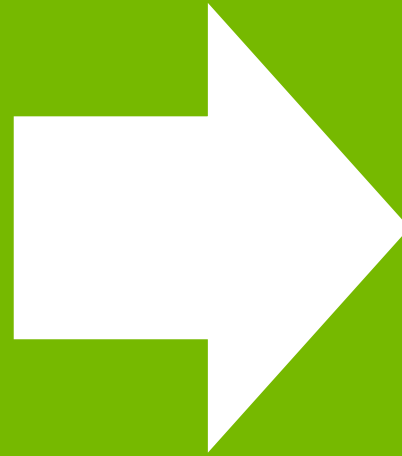


PERFORMANCE FROM THE DATA CENTER

NVIDIA Virtual GPU technology delivers graphics accelerated virtual desktops and applications



All devices have graphics



Virtual machines also need a GPU

WINDOWS 10

Highest Graphics Requirement of any Operating System to Date

WINDOWS XP



WINDOWS 7



WINDOWS 10



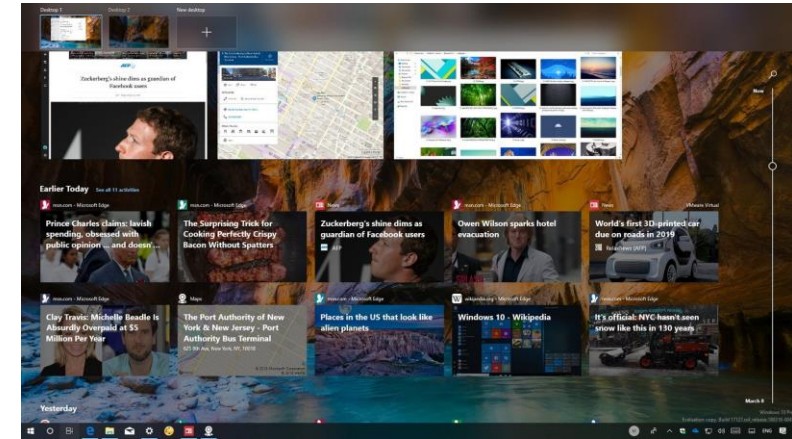
Windows 10 requires 50% increase in graphics usage, compared to Windows 7

WINDOWS 10 BUILDS GET MORE MASSIVE



Windows 10 in 2017*

32% increase in graphics usage from Win7



Windows 10 in 2018*

50% increase in graphics usage from Win7

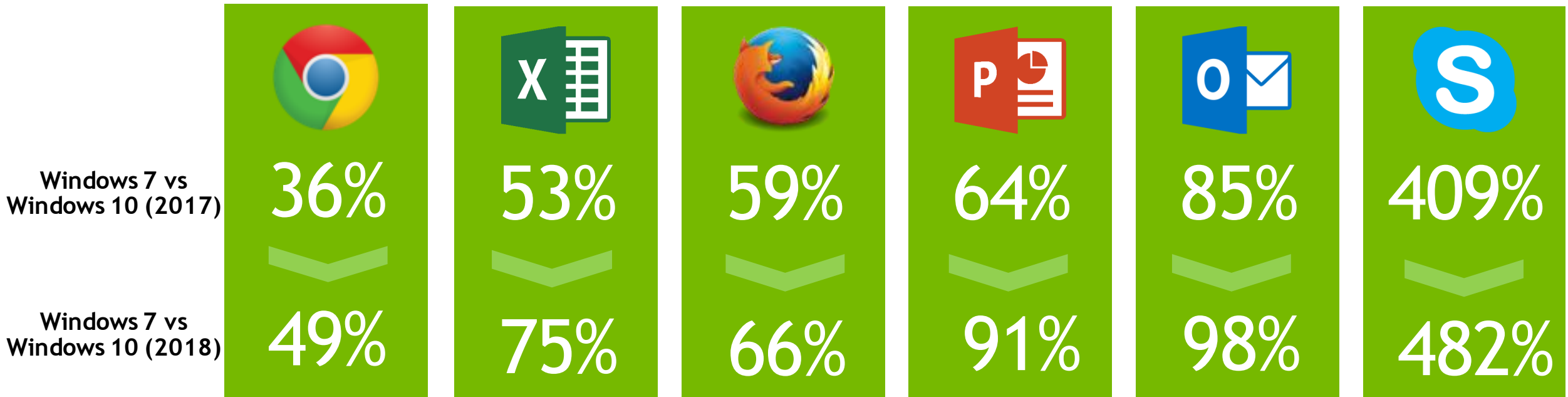
- More 3D features (Snipping Tool, Timeline)
- Set customized graphics performance by application
- Fluent design UI including new “acrylic” texturing
- Motion improvements bring super smooth animations to dropdown menus, opening a new tab and more

20% increase in GPU consumption in Windows 10 from 2017 to 2018

3X increase in GPU consumption from Office 2010 to 2016

MODERN APPS IN THE DIGITAL WORKPLACE

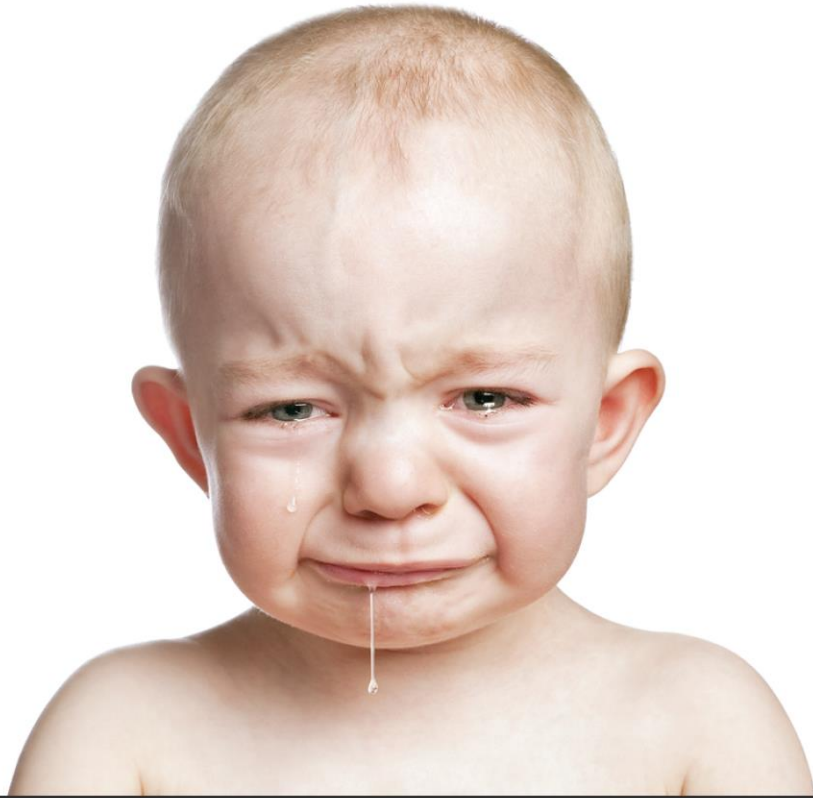
Demands More GPU



Applications that require graphics has doubled since 2012

Over half of enterprise users access at least one graphics accelerated app

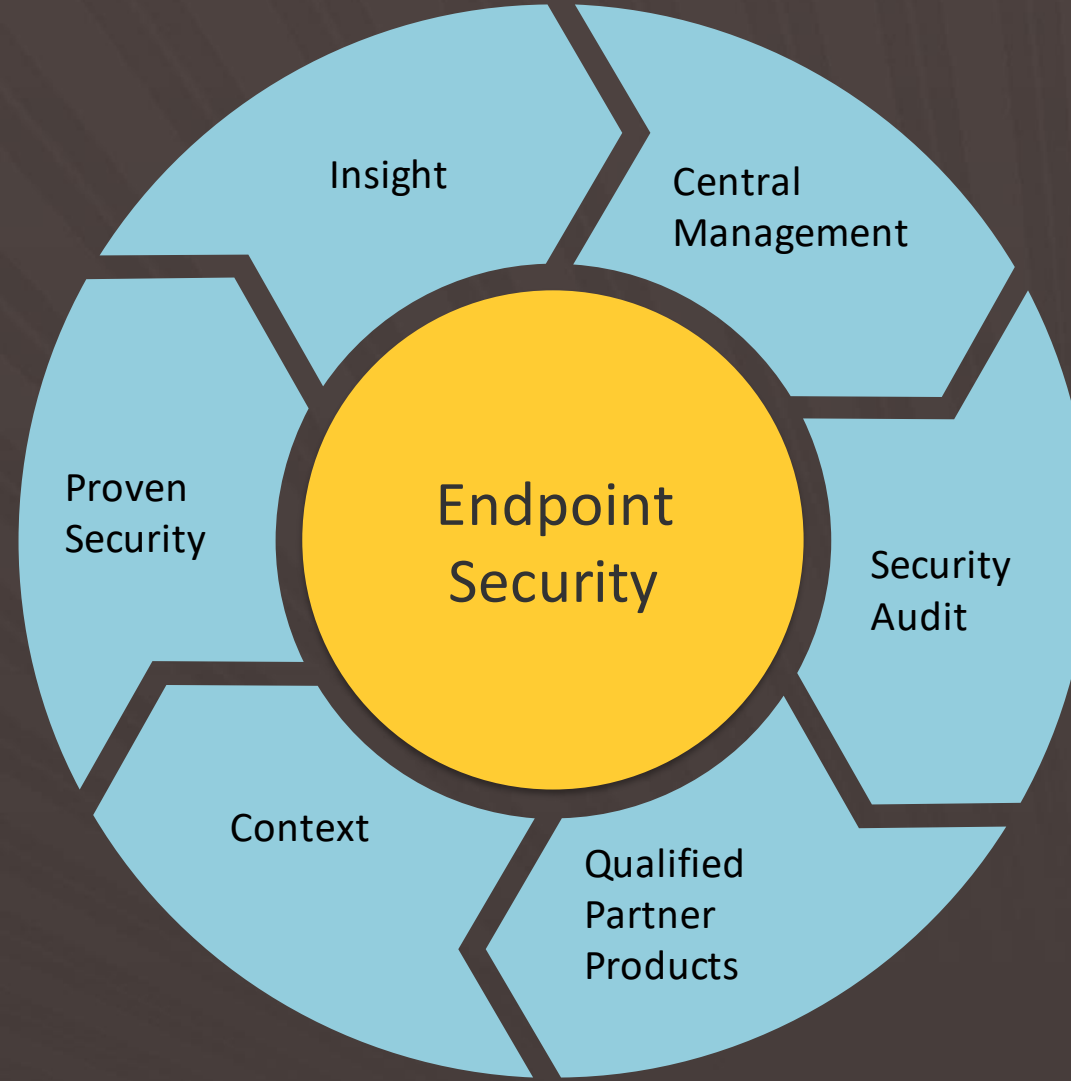
WannaCry **OR** WannaSmile



...without **IGELOS**



...with **IGELOS**



Best Practices:

Skype for Business w/ Citrix, IGEL & NVIDIA



Validated Solution

Microsoft & Citrix



Performance

DataCenter raw processing power

Highly efficient protocol

Endpoint accelerations



Security

VDI

UD Pocket



- Endpoint security
- Performance
- Device Support: headsets
- UD Pocket converts any device

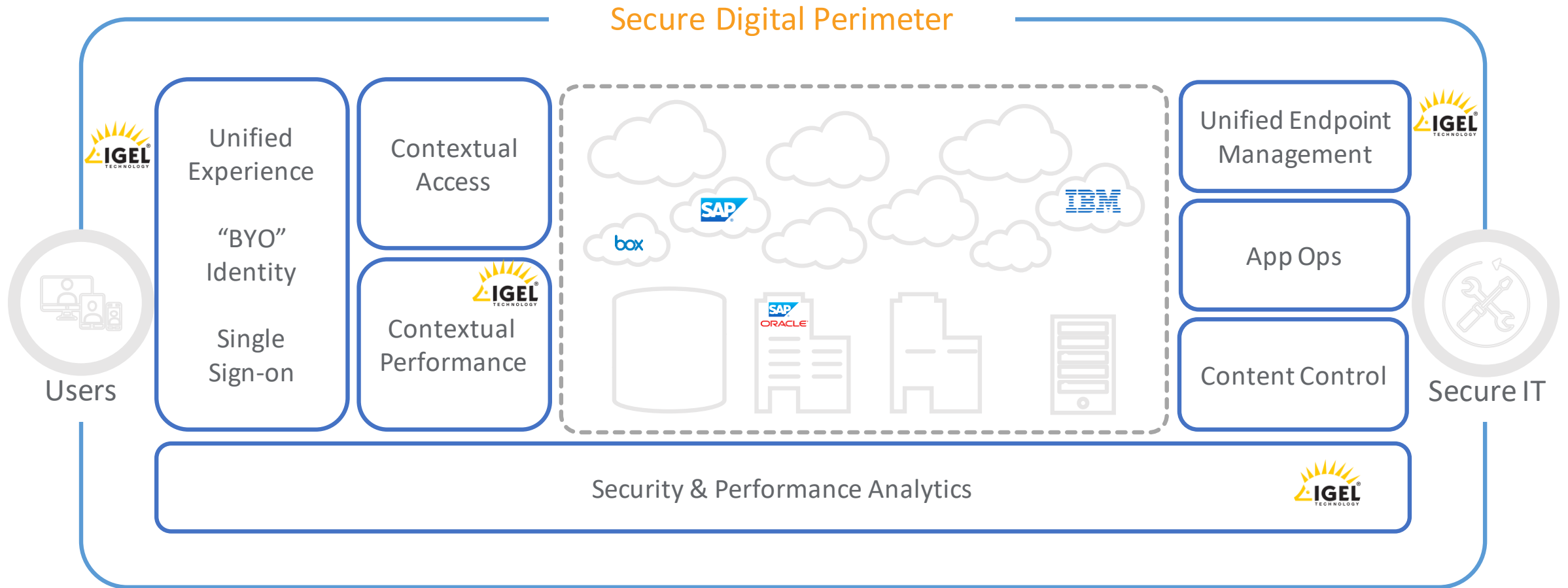


- Performance
- Graphics acceleration



- Performance → ICA
- VDI → Security
- Portability

Citrix Secure Digital Workspace

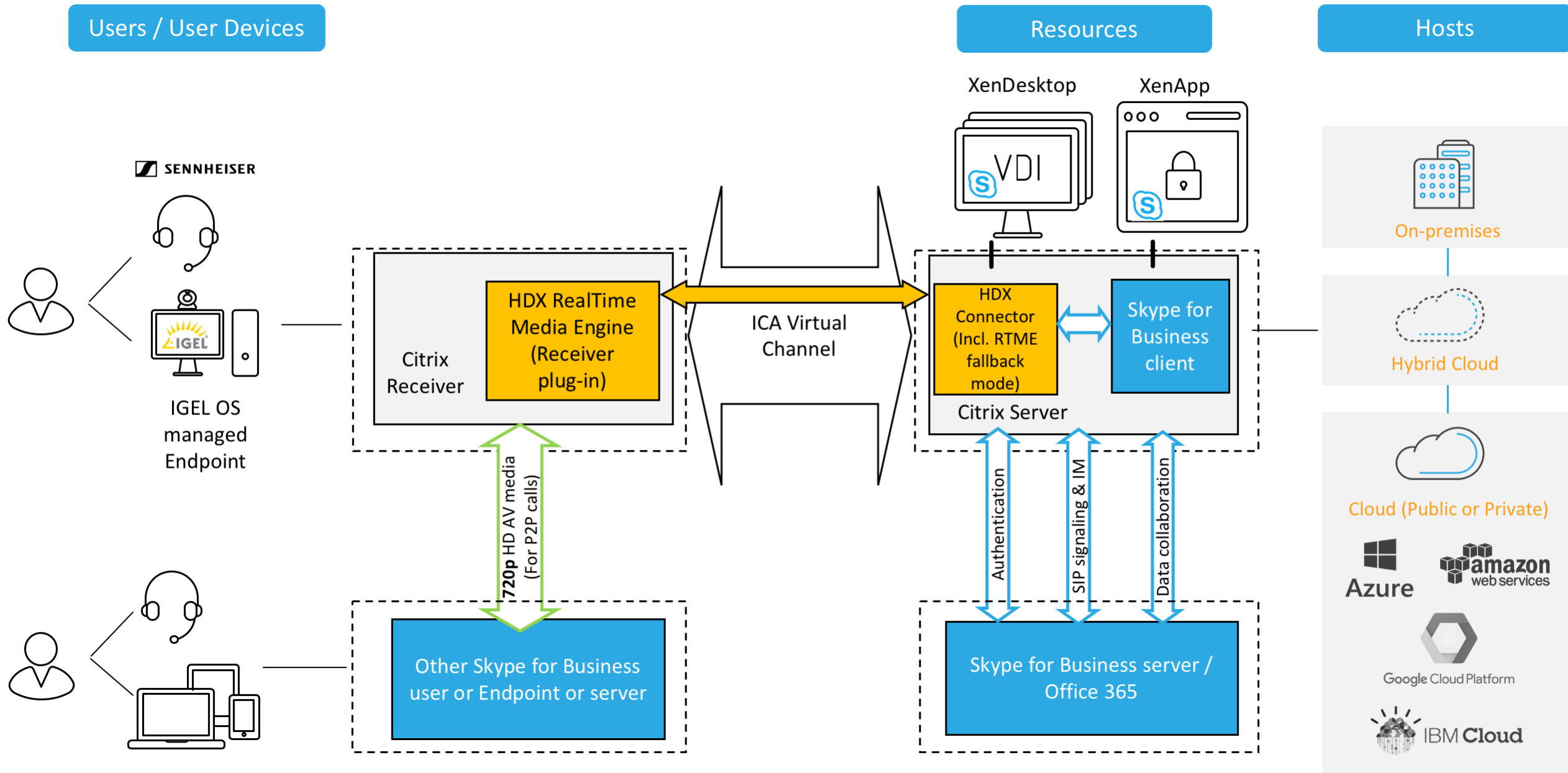


Architectural Review:

Users / User Devices

Resources

Hosts





LIVE DEMO

JEFF KALBERG



Demos



- Windows 7 performance no NVIDIA
- Windows 7 performance w/ NVIDIA



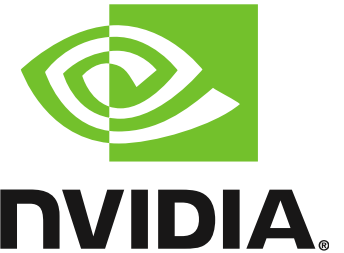
- Windows 10 performance no NVIDIA
- Windows 10 performance w/ NVIDIA



- IGEL OS performance no NVIDIA
- IGEL OS performance w/ NVIDIA



- Performance for Skype for Business no NVIDIA
- Performance for Skype for Business w/ NVIDIA



Conclusions



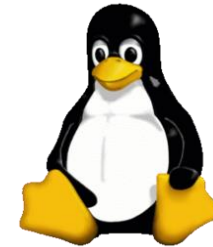
belongs in
the DataCenter



the best way
to **deliver**
Windows 10



most mature
VDI **solution**



on the endpoint is the **most secure** and **cost-effective** solution

Graphics acceleration with



makes sense and
is **cost-effective**



Next Steps

Visit IGEL at booth #328
Download the Software from:
www.igel.com/download

ENTER FOR A CHANCE TO WIN



PORSCHE *Taycan*

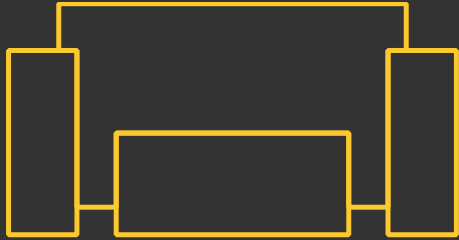
The most anticipated all-electric, software-defined car on the planet.



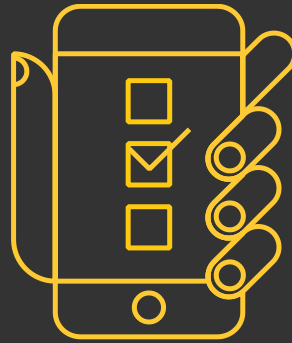
Take a short survey at ichallengeeverything.com | Enter code **GTCTAYCAN**



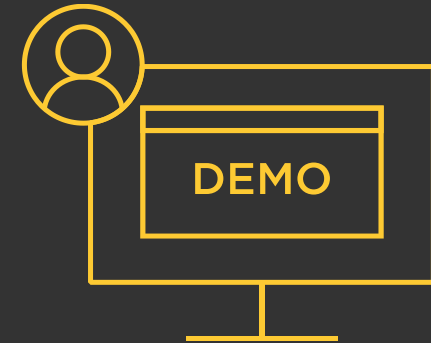
How to Enter



Attend 1 of the qualifying
IGEL events



Complete a short online
survey



Complete a 30 minute demo to
be entered to win

Background Materials



NEW!

UD Pocket™

IGEL offers an enterprise OS solution for any USB bootable device.

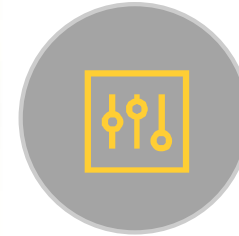
BONUS

A perfect solution for those who want to keep their fat client functionality.

With IGEL, It's all in the software!
Check out www.igel.com/citrix

HOW IT WORKS:

IGEL OS™
indexes each
endpoint.



7K+
CONTROL
SETTINGS



100+
TEMPLATE
LIBRARY

All managed from one central interface.

