

National Aeronautics and Space Administration



CHPS: More Than Just a Tasty Snack

JPL's Collaboration Hosting Platform Service

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Making IT *Stellar* at NASA

IT Summit
2011

Session Objectives and Takeaways

CHPS

- Communicate the CHPS Vision
- Understand High Level Architecture
- Share Best Practices and Lessons Learned from an Enterprise-Wide Deployment
- Provide Insight on how Spaces Framework Enforces Governance

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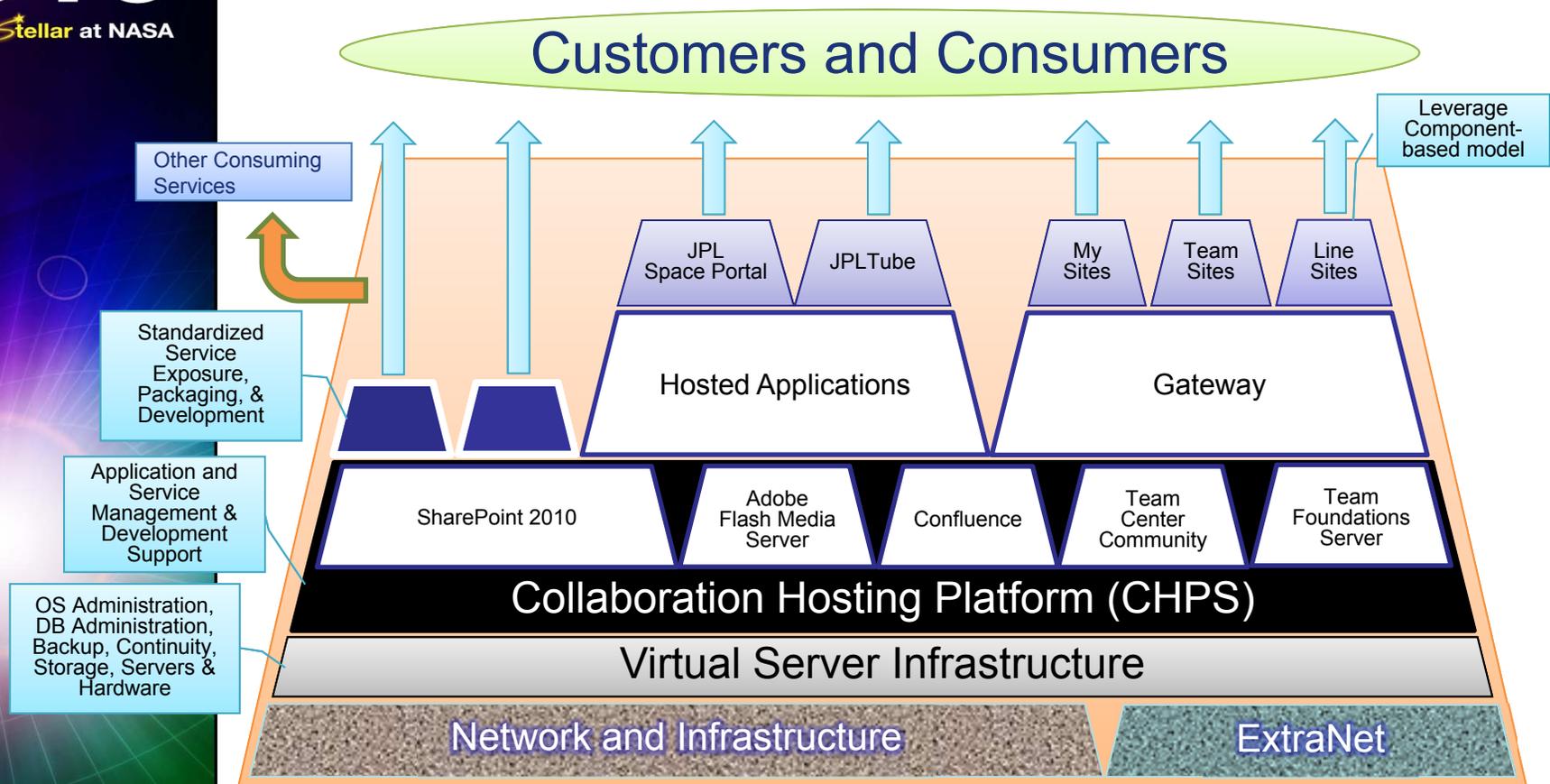


- Deliver a .Net based Platform as a Service (PaaS) to Develop Collaborative Applications
- Expedite Application Development Lifecycles by Integrating Collaborative Features and Capabilities
- Deliver a Secure, Highly-Available, and Scalable Infrastructure that Support Development, Testing, and Production Efforts
- Consolidate Similar Applications by Aggregating Capabilities and Functionalities Together

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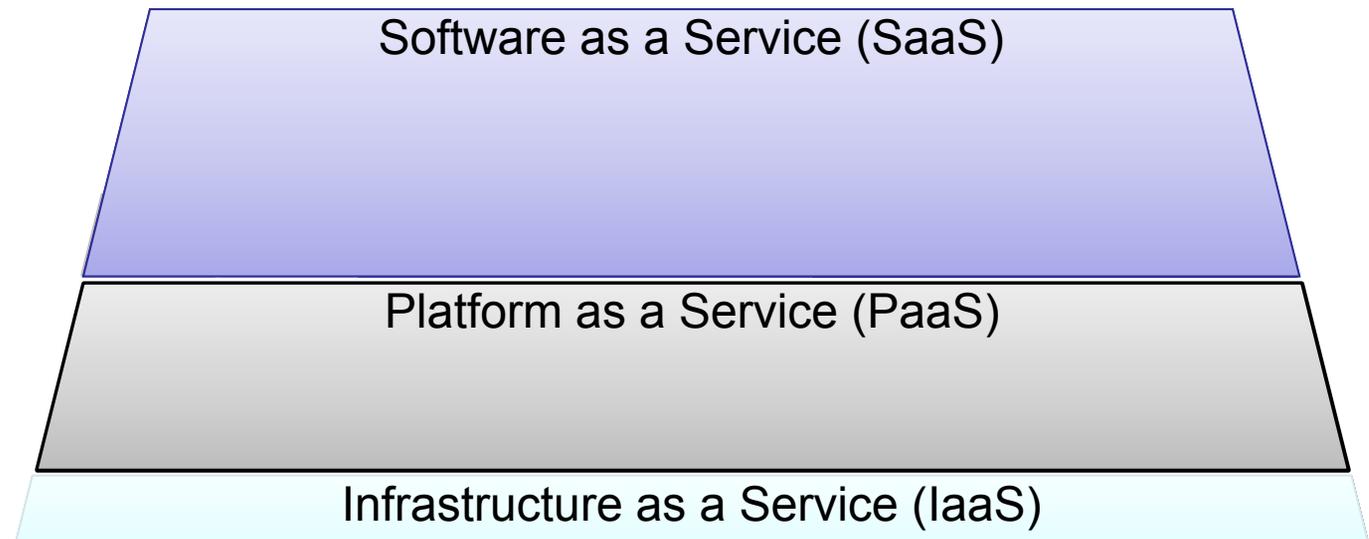
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High-Level Architecture



Graphic courtesy of Michael Stefanini and Gabriel Rangel

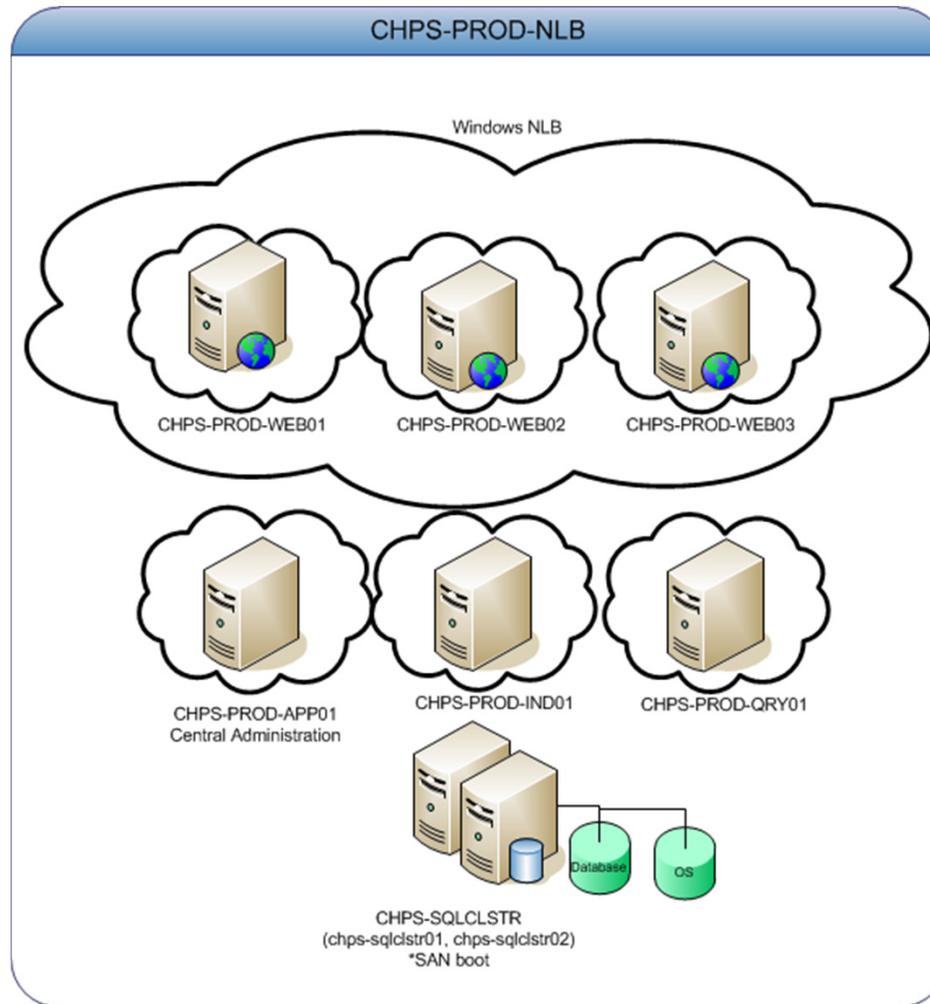
Cloud-Based Architecture



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Production Farm



APPLICATION POOLS

Apps – 443
Non-Gateway application app pool
Apps should be delivered via JUMP
[Https://appspace.jpl.nasa.gov](https://appspace.jpl.nasa.gov)

Central Admin
SSL port 22222
[Https://chps-prod-app01.jpl.nasa.gov:22222](https://chps-prod-app01.jpl.nasa.gov:22222)

Claims – 443
Claims based authentication pool
Sherona is primary application
[Https://claimspace.jpl.nasa.gov](https://claimspace.jpl.nasa.gov)

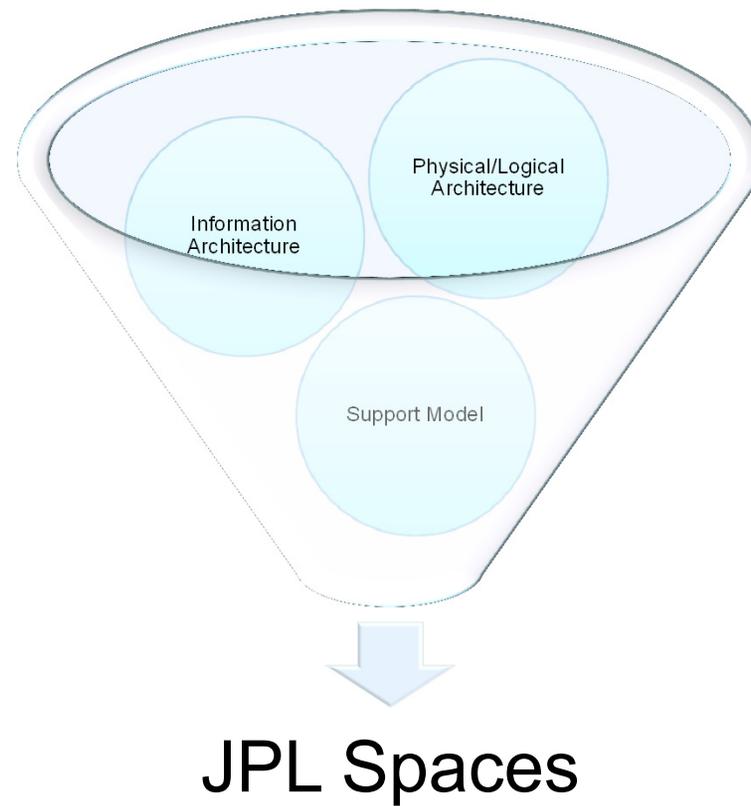
Forms – 443
Forms and workflow app pool
Initial site is VM provisioning
[Https://formspace.jpl.nasa.gov](https://formspace.jpl.nasa.gov)

Sharepoint – 80
Actually uses port 443
Gateway web app
[Https://gateway.jpl.nasa.gov](https://gateway.jpl.nasa.gov)

Remove port numbers.
Add FMS server, TCC, etc.
Show relations.

Spaces Framework Governance

What is a Space?



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Spaces Ten Commandments



Lessons Learned



Cloud Integration



Windows Azure Platform Integration



Google Docs Collaboration Capability



EC2 Hosting/Disaster Recovery
S3 Storage and Backup

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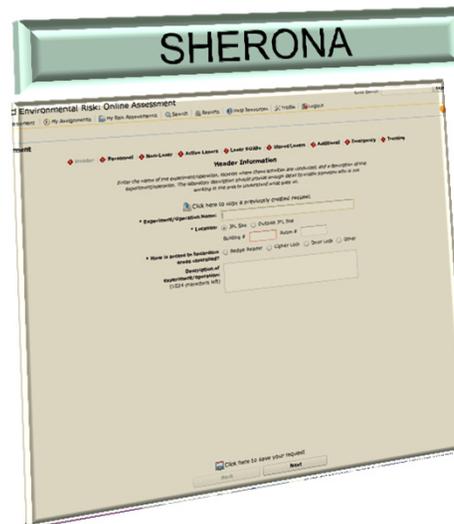
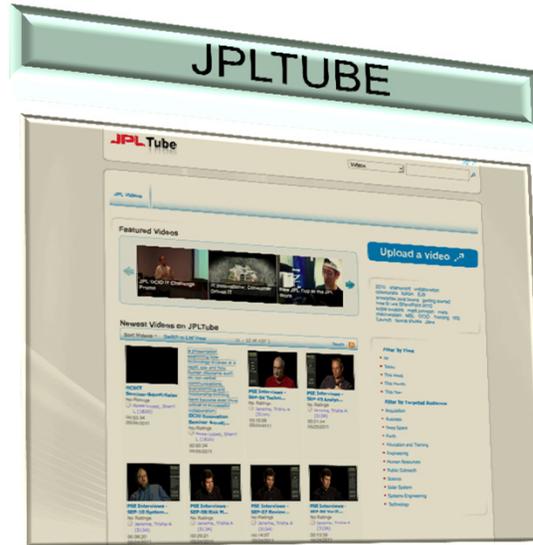
Partnering



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Applications



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Questions?

