Enterprise Cloud: Accelerate Your Journey with CA AppLogic for System z

Andrew M Chapman
VP, Product Management

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Agenda

- Why System z for the cloud?
  - What is motivating people to use System z for cloud?
  - How is Linux deployed on the mainframe today?
- Current deployment solutions
  - Why are today's solutions problematic?
- CA AppLogic for System z overview
  - What is it and how does it work?
  - How does it increase your productivity?
  - How can it decrease your costs and risks?
- Summary

Why System z for

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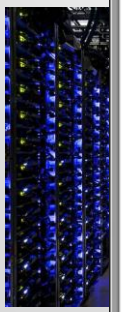
- Want to keep/move cloud workloads in-h
- Require high RASSS environment
  - Reliability, Accessibi Stability and Scalabi
- Looking to lower cos



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Thoughts about the Cloud, Virtualization, Mainframes, Enterprise Software...and other stuff.

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03/10/2013

Linux on System z–A Cost Saver?

One of the claims that we in the Linux on System z world make is that it can be more cost effective to run your systems on the mainframe than using a distributed x86-based architecture. I was trawling my research and decided to post some of the key data points and quotations that support this hypothesis. There's a huge amount of research behind this but if I were talking to a customer and wanted to hit the highlights this would be a good starting point:

- Over a three year period, total costs for hardware, software and support can be up to 80% less with similar dramatic savings on floor space and energy.
- Using a fully configured machine running Linux for System z, clients can create and maintain a Linux virtual server in the z114 for as little as $500 per year.[1]
- Extra resources to manage an additional 10 IFLs? Probably none at all but add 100 x86 cores you'll need an additional two people.
- Clients can consolidate workloads from forty x-86 processors running Oracle software on to a z114 with just three processors running Linux.
  - Run production, development and QA environment on single machine
  - Much better resource utilization (often 90%+) without degradation on service vs. x86 typically at 10-20% utilization levels
- Just take Oracle licensing costs as an example. A System z10 BC with one IFL compared to cluster of two x86 dual-processor Intel quad-core servers:
  - Saving 87.5% on licensing Oracle Database Enterprise Edition Full License
  - Saving 87.5% per annum on the cost of Oracle Database Enterprise Edition
- According to Gartner, one major Insurance Company
  - Saved ~80% of floor space and a similar percentage of electric power
  - Avoided investing additional $10 million for backup
  - Reduced TCO by $15 million in 3 years

[1] http://www-03.ibm.com/press/us/en/pressrelease/35013.wss

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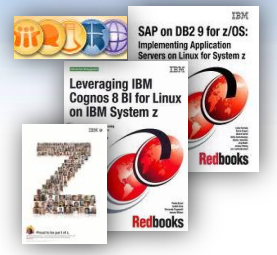
Current Deployment Solutions

Just provision Linux container

Add virtual infrastructure and/or middleware

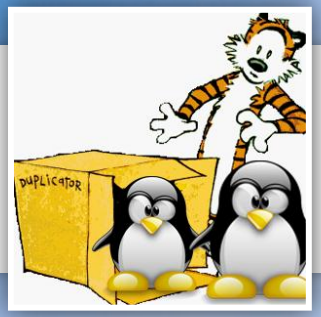
Provision entire application stack



Current Deployment Solutions

Just provision Linux container

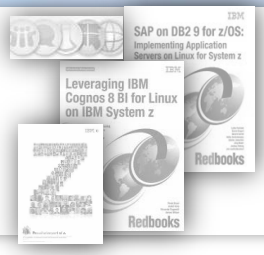
Clone a golden image



Add virtual infrastructure and/or middleware

Script customization

Provision entire application stack



Manually install and configure

Evaluating Deployment Options

Provisioning just Linux or entire application? Consider…

Provisioning

- Speed to value
- Accuracy
- Auditing and reporting
- Resource allocation and constraints

Ongoing Management

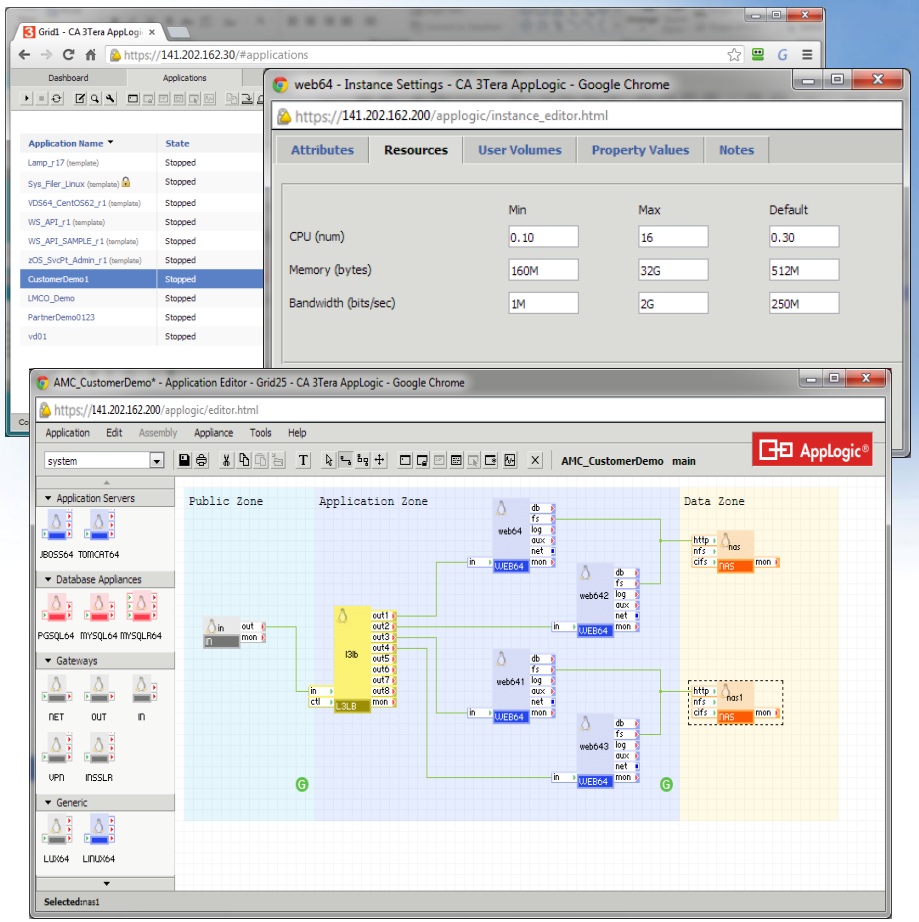
- Manage to service level objectives
- Linux patching and upgrades
- Component patching and upgrades etc.
- Charge/show back

Controlled De-provisioning

- End of application lifecycle
- Varying capacity demands
- Efficient use of system resources

Simplify Linux on System z
and accelerate mainframe cloud

CA AppLogic® for System z



Quickly design, provision and manage cloud applications on System z

Reduce costs and increase efficiency

- Host thousands of Linux on System z applications on a single zEnterprise server
- Replaces need for hundreds of distributed servers and their required network fabric

Easily connect to z/OS transactions and databases

Self-service provisioning on System z combines cost reduction and agility with massive scalability and reliability

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Introducing CA AppLogic® for System z
a turnkey application platform

Virtualize Linux on System z application and its ENTIRE infrastructure

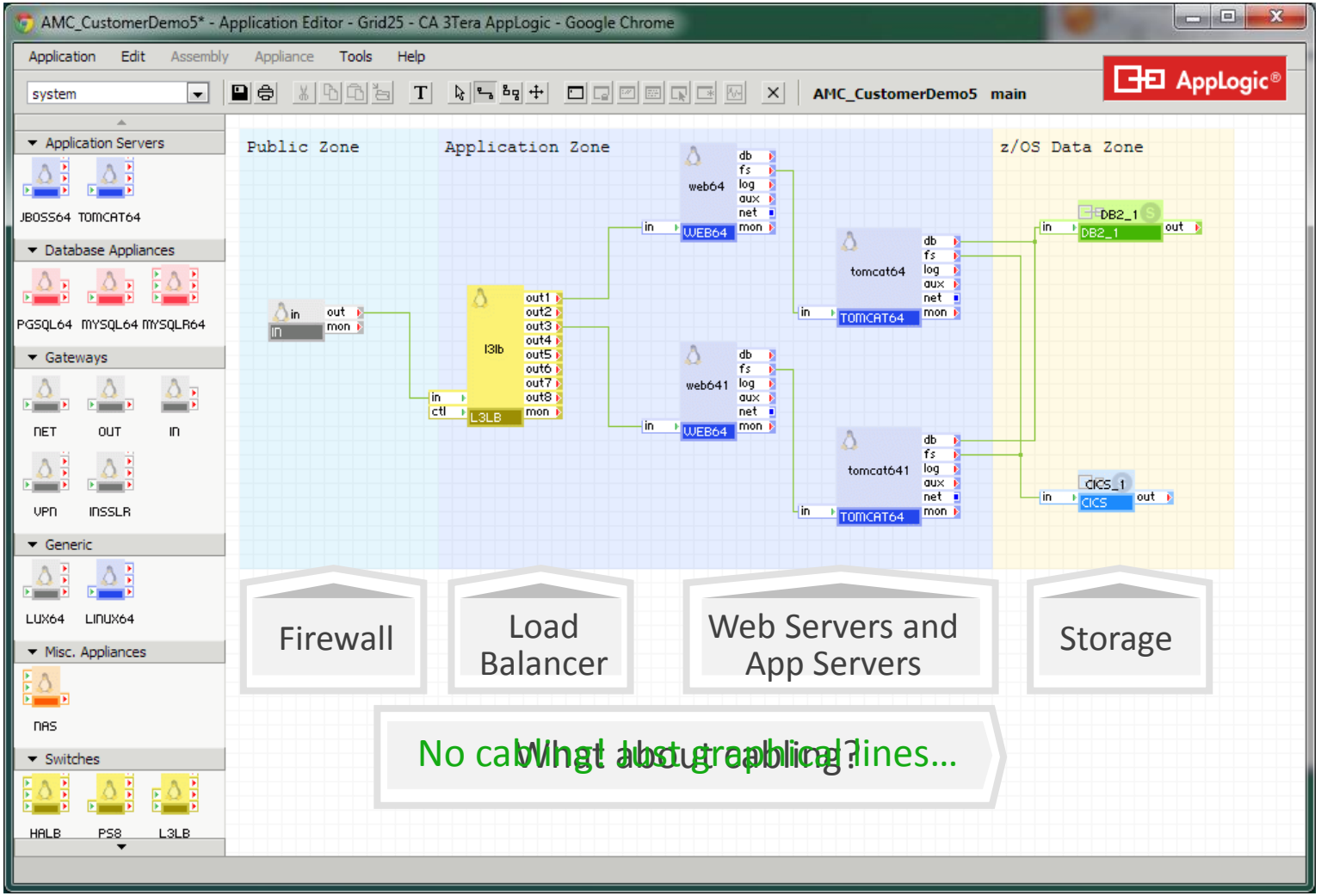
- Firewalls
- Load balancers
- Web servers
- App servers
- Storage

CA AppLogic for System z
simplify deployment

Automatically scale, easily migrate and instantly replicate entire Virtualized Business Service

Quickly and Easily Scale

Using CA AppLogic for System z



CA AppLogic for System z
taking a closer look

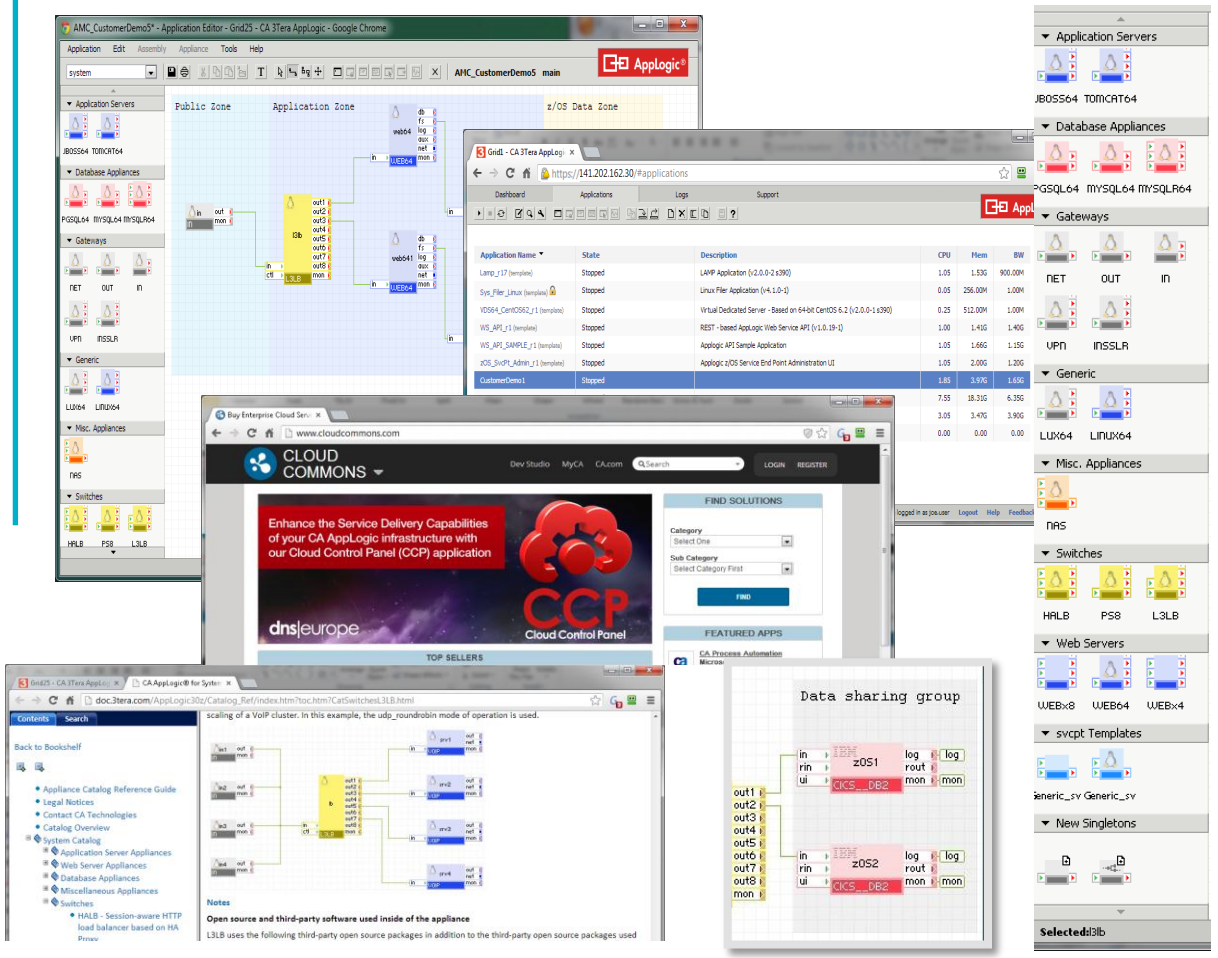
System Dashboard - Applications Tab

Infrastructure Editor – Catalog

Infrastructure Editor – Appliances Instances

z/OS Service End Point

Virtual network connections



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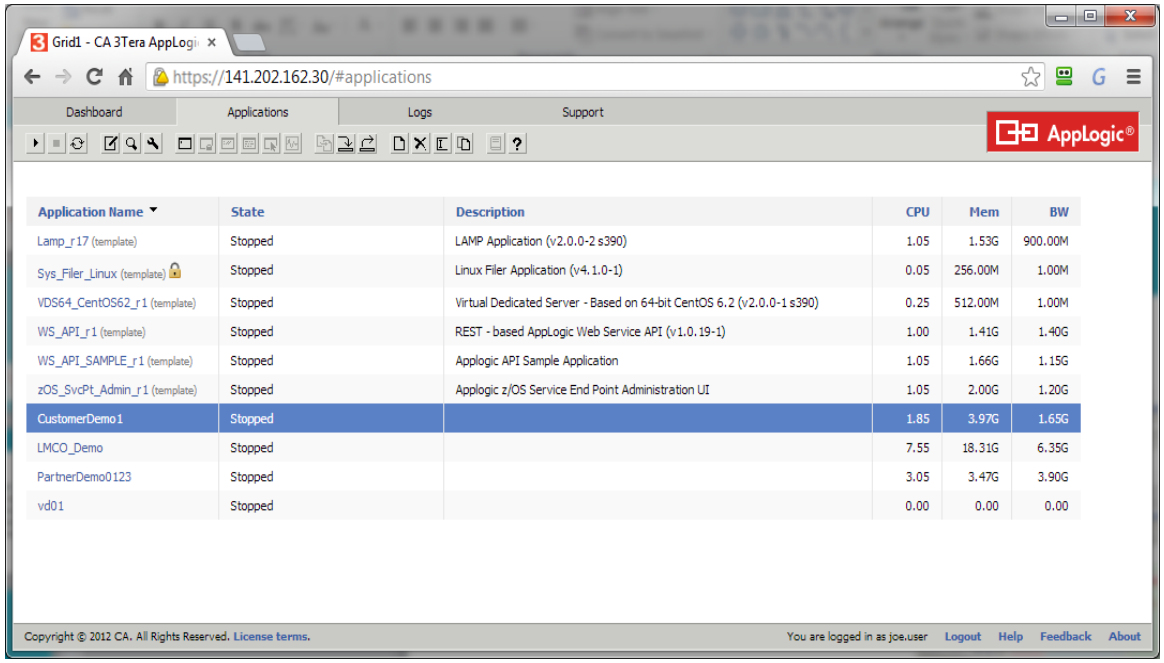

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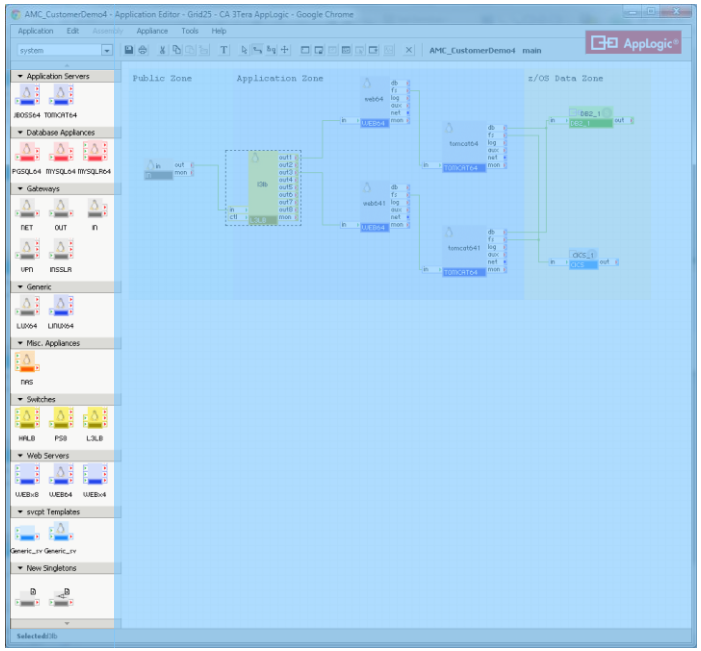

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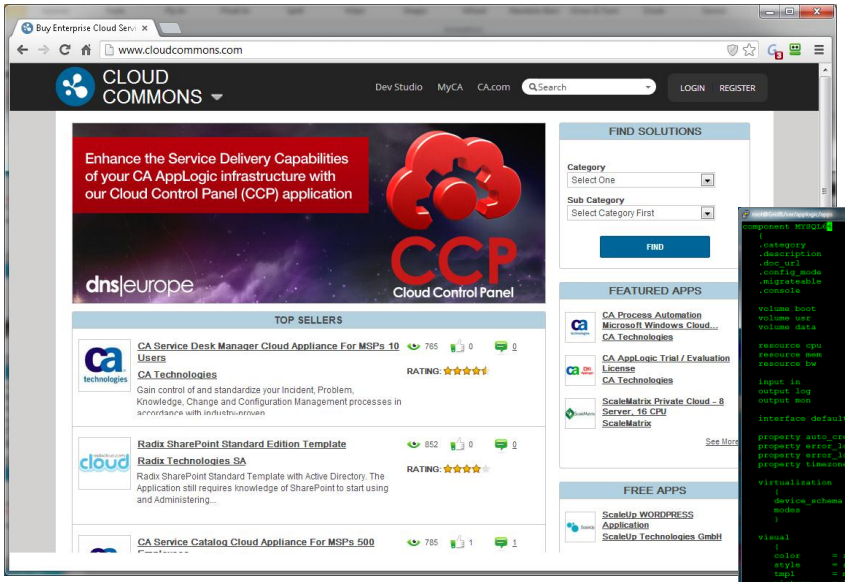

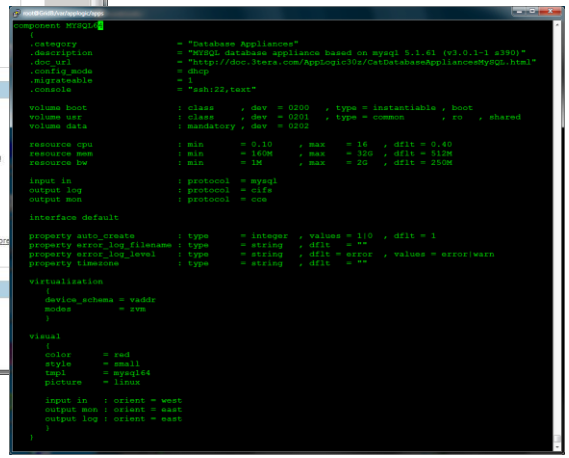

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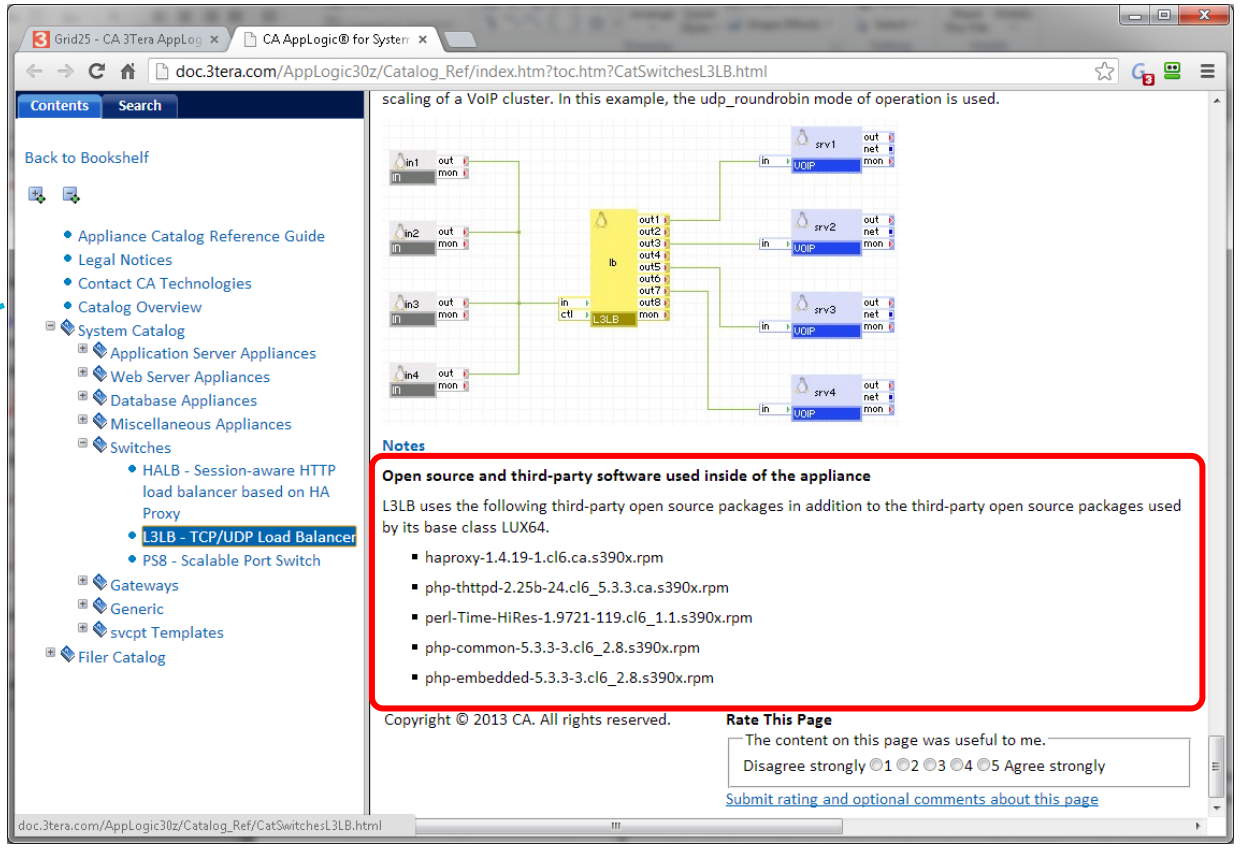
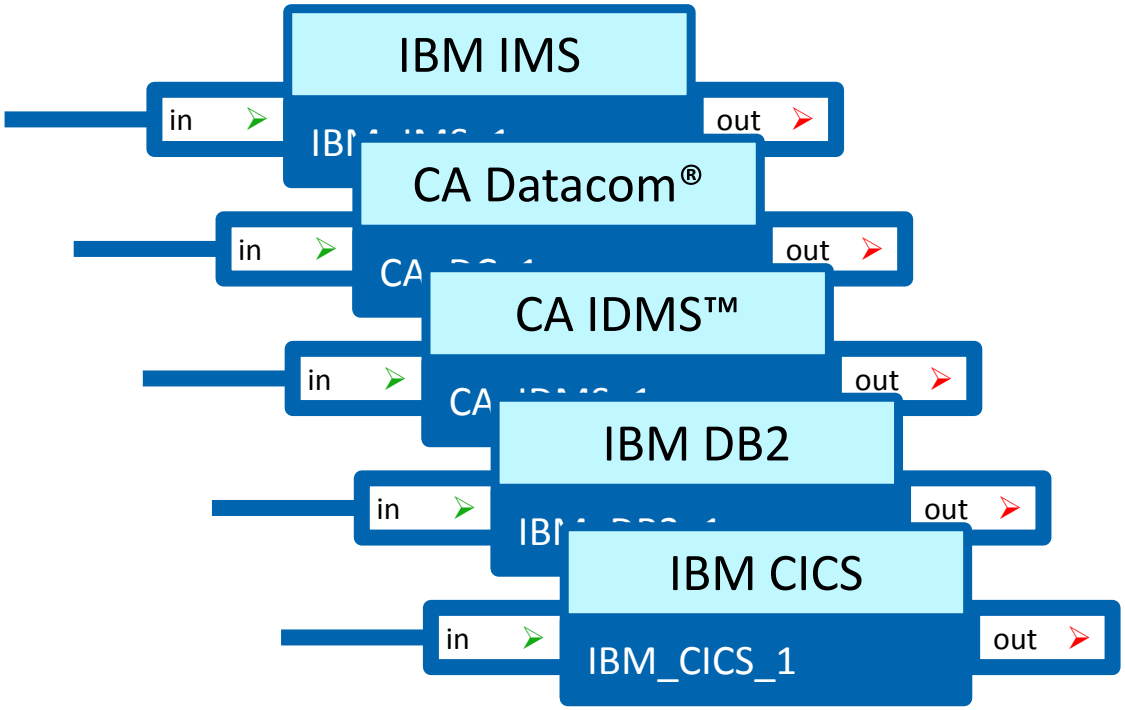
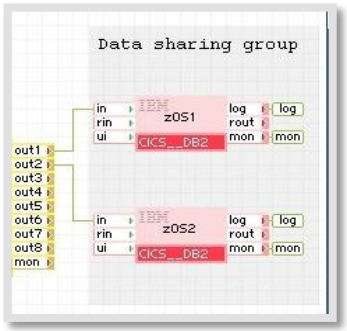
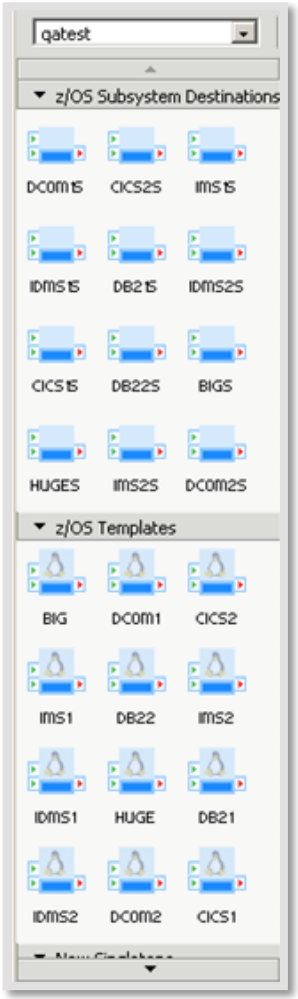


CA AppLogic for System z
z/OS Service End Point

Five certified z/OS subsystems:







…or create your own

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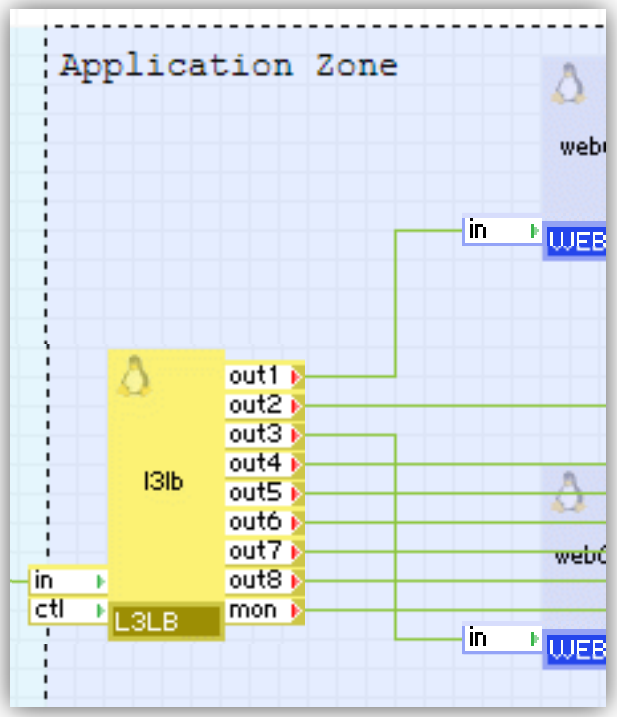

Advantages of the CA AppLogic® methodology

Self-validating deployments. AppLogic for System z checks system settings and pipework before launching applications

Easy access. Provide as much or as little access to resources on grid as necessary

Easy to construct. "Next" instances of appliances can be easily created from current versions

Easy to move. Appliances can be quickly moved from one grid to another for production, application migration or DR processing

Simplified recovery. Recovery techniques can be designed into appliance implementation as a policy

Quickly scale. Quickly provide "raw" capacity to App Dev or QA without having to interact to provision, implement virtual machines

Benefits of a virtual business service

ability to deploy applications & services in minutes

More Agility for Enterprises

- Build and deploy apps in minutes!
- On-demand elasticity and flexibility
- Replicate and scale apps instantly
- Work through an intuitive GUI, not by pulling cables and copying gold images

Leverage Power of Linux on System z

- Increase RASSS
- Reduce datacenter costs
- Reduce management costs
- Easier interoperability with z/OS
- The ultimate cloud platform

Summary

Linux on System z is the optimal platform for many scenarios

Today's methods are expensive, slow and high risk

CA AppLogic for System z:

- Simplifies deployment and management of Linux on the mainframe
- Provides a cost-effective, robust cloud platform
- Increases your productivity while reducing risk

Q&A

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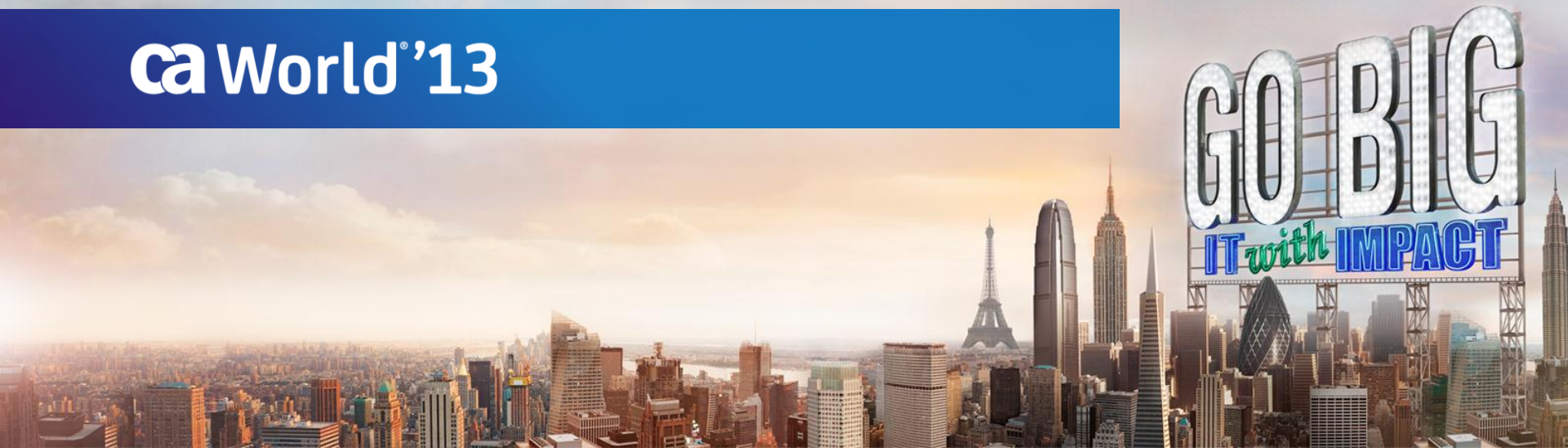

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