

Metal to Cloud on an IBM z15 T02

www.VelocitySoftware.com

www.LinuxVM.com

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Topics

- **Planning**
- **Implementation**
- **Results**

- **Planning is critical to efficient implementation**
- **Hardware**
 - Physical site including data center and layout
 - What hardware: z15-T02, DS8910F, miscellaneous routers, switches, server
 - Numbers and types of I/O cards
 - Cables
 - Purchase and shipping
 - LPAR definitions
- **Watch out for the Unplanned**
 - Coronavirus

- **Software**
 - I/O cabling plan; CHPID Mapping Tool; IOCP
 - Driver Exception Letter
 - PSP buckets: DEVICE8562, subset 8562/ZVM & 8562/ZOS
 - Install software support required for hardware
 - VM-specific configuration
 - SYSTEM CONFIG
 - SYSTEM NETID
 - VSWITCH configurations

Implementation

Install the hardware

- Rack, networking, miscellaneous:
A few hours over several days
- z15: Four hours
 - Sometimes things happen and require time to resolve
 - This was a hardware ESP



Implementation

- DS8910F
 - Most of one day



- This box intentionally left blank



Z = Simplicity Our Entire Data Center

- **What's not needed?**

- Lots of racks
- Lots of expensive network switches for SAN and multiple network interfaces
- Lots of environmental support: space, power, cooling



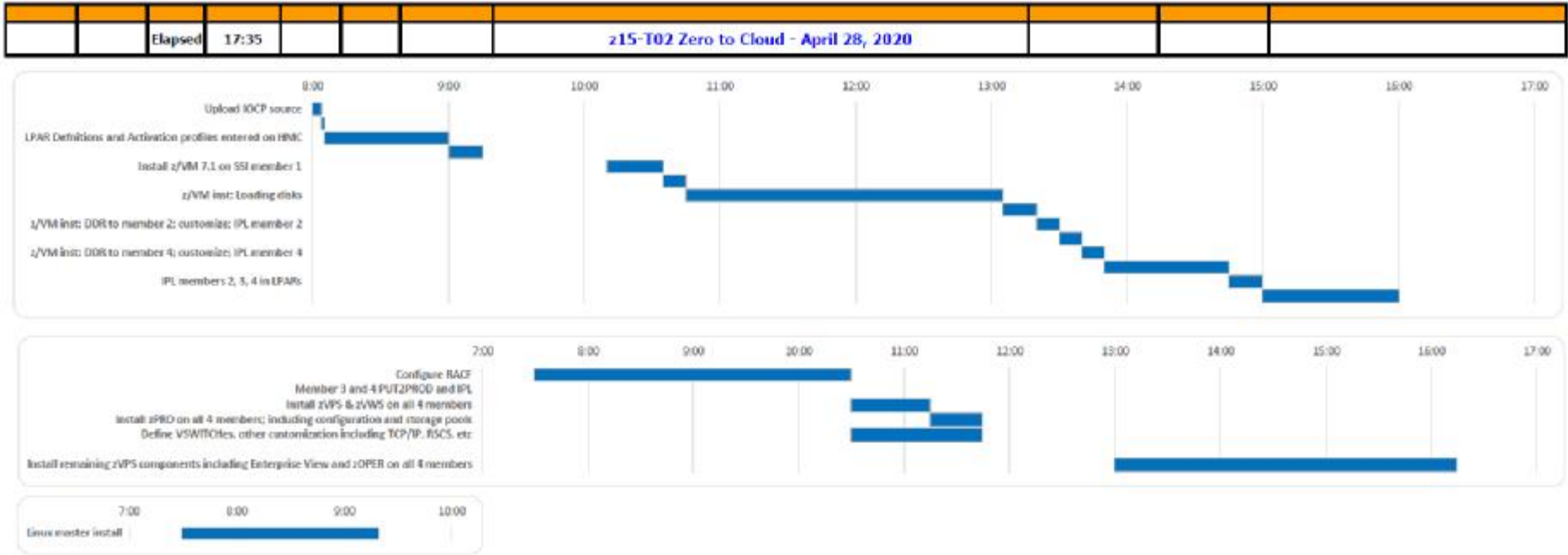
Implementation

Install the software – under 18 hours for functional cloud

- z/VM four member Single System Image cluster
 - Five hours
 - Some components require a lot of effort or have difficult documentation – RACF
- z/VM Service
 - Zero or more hours; base install includes one RSU – additional RSU & COR may be needed
- Velocity Suite
 - Installer, zVWS, zPRO, zVPS performance components – 4 ½ hours
- Linux master image
 - 2 hours

Implementation

Install the software – under 18 hours for functional cloud



PROVEN PERFORMANCE

- **z15 is...**
 - Fast - three generations newer than zBC12 it replaced
 - Feature rich
 - On chip data compression
 - We achieved 80% reduction in data passing from z/OS to z/VM
 - System Recovery boost
 - Crypto Express 7
 - Others...
- **DS8910F**
 - All solid state; compact
 - Feature rich
 - Flashcopy, Global Mirror, etc
- **Early Ship Program**
 - **Work with IBM labs**
 - Access to new hardware before it is generally available