



## Back from the Brink or "Living on Mainframe Time" Session 8778

John R. Palmer – DND, Canada March 2, 2011



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#### Abstract

Two short years ago, mainframes were literally and figuratively being pushed out of Canada's Department of National Defence (DND).

With the growth of the distributed world and a veritable glut of Windows admins, walls were built up against "those expensive mainframes", who responded by putting up walls of their own. Since mainframes never "broke" nobody ever complained, and eventually the only people who knew they existed were those who supported them and those who counted the money and only one of those groups were interested in keeping them. This fiscal year, DND's mainframe support section received funding to allow for unprecedented growth, including virtualized Linux, model upgrades, increased redundancy and the upcoming purchase of a fourth mainframe.

- November 2010



#### Agenda

- Introduction
- At the brink
- Tentative steps
- Jumping back from the brink
- Tomorrow
- Key points
- Challenges
- This just in!
- Questions?



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#### Introduction: about me



- BES, *BA, MA*
- Former sales manager in retail electronics industry
- 20 years in IT in the Government of Canada
  - Help Desk
  - Windows Administration
  - Lotus Notes/Domino design and administration
  - IT Security
  - Management of departmental WAN's (including international)





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#### Introduction: organizational context



#### **Introduction: pre-history**

#### **Directorate of Datacentre Management**





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#### At the brink: organizational change

IM Technologies IT LCMM Engineering **Facilities** 4 Distributed Storage Mainframe Systems  $\boldsymbol{\varsigma}$ in Anaheim





2011



#### At the brink: hardware



- Low workload
  - (was converted into a CF)
- z9EC
  - SAP / DB2
    - Military Acquisition Application
- z10EC
  - SAP / CICS / MQSeries / DB2
    - Military Pay
    - Supply System
    - Financial Management System



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**Tentative steps** 

### "I want you to find new ways to use and grow the technology"

W. Sorfleet, Director



#### **Tentative steps cont'd**

- Consolidation of all mainframe-related tasks:
  - Hardware / Software / Storage support
  - Contracting for Software / Hardware / Maintenance
  - Business Recovery contract management
    - Role of BR Manager transferred as well
  - Transfer of all mainframe-related funding
    - All mainframe purchasing / upgrades under one area of control
  - Control of the environment, top to bottom





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#### **Tentative steps cont'd**

- SHARE Spring 2009
  - Beginning of zVM / Linux on z POC
  - Beginning of "selling" the mainframe
- Tech Tour Fall 2009
  - Poughkeepsie, NY
    - Director-General
    - Director
    - Lead Departmental IT Architect
- Initial "growth" based on Oracle on zVM/Linux on z
- However ...
  - A continued battle between "our" Linux and distributed Linux





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### Jumping back from the brink

- Projects implemented in 2010:
  - Upgraded existing z10 for redundancy \$
  - Additional IFL's / OSA Cards for zVM / Linux on z architecture \$
  - Upgrade z9EC to z10EC \$
  - Beginning build of Pilot environment for Department-wide EITSM project on Linux on z
    - closer working relationship with Dist
- Arrival of zEnterprise (z196)! \$





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#### Tomorrow

- Business Recovery
  - 18 months to move to an in-house solution centred on z196 platform
- Completion of core zVM /Linux on z environment that can be replicated across other areas
- Purchase of zBX for z196 internal testing and use of pSeries blade environment
- Summer / Fall 2011 renewal of z10 leases / potential upgrades to z196 and further consolidation efforts



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#### **Key points**

- Can you sell ice cubes to Eskimos?
- Do you know your organizational pain points?
  - Space? Power? Cooling? Oracle licensing? BR?
- Are you playing nicely with others?
- Do you have control of your environment?
- Is there possible synergy with other units?



#### Challenges

- Security understanding
- Engineering specialization
- Replication between sites
- Culture



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### This just in!

- Effective February 1, 2011
  - Responsibility for mainframe storage transferred to Enterprise storage management
  - All distributed Linux moved into my section
  - All AIX / Unix / Solaris moved into my section
  - Focus changed from "Mainframe Hosting" to "Enterprise Hosting"



#### **Questions?**



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