



Veterans Affairs
Canada

Anciens Combattants
Canada

Veterans Affairs Canada

DR backup in 24x7

www.vac-acc.gc.ca

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Our Vision

To provide exemplary
service which
honours the sacrifice
and achievements of
our veterans and
clients.

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Our Clients

- **Total Veteran Population and other VAC Clients in Canada is about 800,000**
 - 2 World War I Veterans left
- **Which Include:**
 - War Veterans
 - Merchant Navy
 - Active Duty Areas
 - RCMP

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VAC Overview

- Canada
 - **Population is 31,612,897 (2006)**
 - **9,984,670 square kilometres (2nd Largest in the World)**
 - **5,514 kilometres across**
 - **Staff 3,985**
- HO, DO and RO - 34 Offices
- VA Hospital
- Maintains battlefield memorials in Europe
 - **Most Notably Vimy Ridge France**
 - **3,598 dead out of 10,602 Canadian casualties**

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VAC MainFrame Infrastructure

- Z9 BC zOSe 1.7 32Gig ram
- 1 CPU 380 MIPS 1 ZAAP 480 MIPS
- 1.5 Terabyte shark
- Gig link
- Production 9.2.0.8
- Dev 10.2.0.3
- Websphere 5.0

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VAC Application Environment

- Websphere 5.0
 - 14 server instances in 3 cells
 - 4 PROD, 5 IFT and 5 DEV
- MQSeries and LDAP
- Oracle 9.2.0.8
 - 25 Databases
 - 12 Production
 - 5 high availability (Hot backups)
- 7000K WAN
- Windows XP NAL

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VAC Backup Strategy

- Hot backup for high availability bases
 - Start Hot backup mode
 - File level flash copy to managed disks (2 mins)
 - End Hot backup
 - Archives copied to managed disk
 - Copy everything to GDG Tape
- Hot Copy for test bases
- Cold backups for internal applications

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VAC DR Backup details

- VAC MainFrame hardware is outsourced
- DR backup is outside VAC's scope.
- DBA normal backup process is controlled by VAC
 - Nightly, weekly, monthly, yearly

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DR coordination

- VAC and Host do not have a common scheduler.
- How do we coordinate for DR backup
- We don't – We simply do Hot backups to disk
- Those disks are backup
- We restore of over actually database from these disks.
- We use redo log recover method

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VAC

- Demo

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VAC External Applications

- **CVWM (Canadian Virtual War Memorial)**
 - <http://www.vac-acc.gc.ca/remembers/sub.cfm?source=collections/virtualmem>
 - Browser / ColdFusion / Oracle 9205
- **GTS (Graves Tracking System)**
 - Browser / Websphere / Oracle 9205
- **ODPS (Online Disability Pensions Submissions)**
 - Browser / Websphere / MQSeries / Secure Channel / HP ORACLE
 - Pubic
- **EHFS (Electronic Health Care Forms Submissions)**
 - Browser / Websphere / MQSeries / HP ORACLE
 - Nurse and Client workers

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VAC Hint

- For WLM always use ENCLAVE(CALL)
- Except when you have a long run jobs that you want to drop down in priority, but does because there 100s to 1000s of small query that do finish in period 1.
- Use ENCLAVE(SESS) to get this work to drop down.
- We have one listener set up for these cases

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VAC Wish list

- Not more versions of oracle, but Better versions
- 64 bit
- Import / export across platform without FTPing
- Spool to work
- LDAP
- OEM working on / with USS
- USS “real support”
 - Links to pdfs
- Better Docs for zOS and USS
- SIG members to use forums more

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Questions

Vic Douse

Application Support Leader

Database Management

Applied Technology Solutions Division

Address: 97 Queen Street, PO Box 7700

Charlottetown PE, C1A 8M9

Email vic.douse@vac-acc.gc.ca

Telephone 902-566-8227

Facsimile 902-566-7475



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