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RDB Tools at TRIUMF/ISAC

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State of the ISAC Radiocactive Beam Facility

- half way
 - ISAC-I routine operation
 - ISAC-II start installation (SC linac)
- no change in controls man-power (6 EPICS3)
- tools are vital

EPICS Environment at ISAC

- EPICS 3.13.10
- EPICS 3.14.6 (softIOC, gateway)
- vxWorks 5.5 (MV162, 486, Pentium)
- Capfast
- Edd/dm >>> Edm
- Trar archiver
- Striptool, alh, ...

- IOCs
 - 20 >>25 (ISAC)
 - 10 (other systems)
- 80k EPICS records

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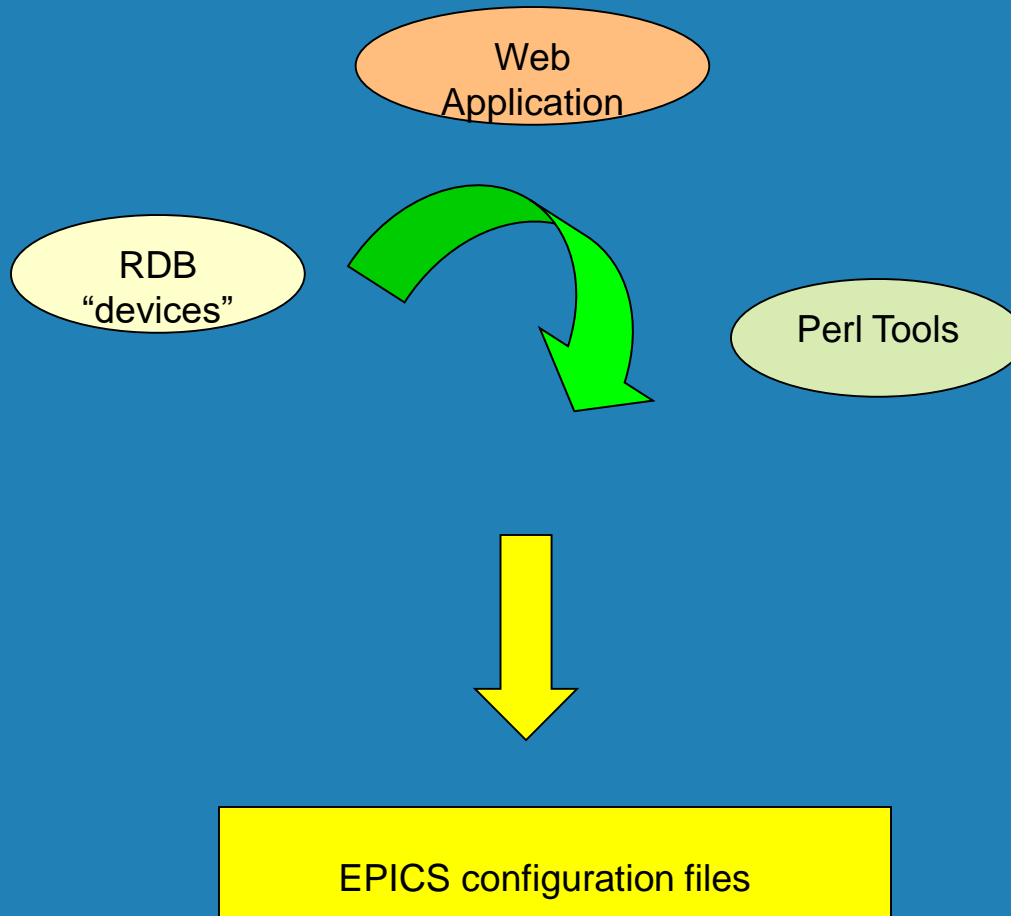
EPICS Environment (2)

Development	Solaris
Production file servers	Solaris
User display servers	Linux
Operator consoles	Linux
User consoles	Windows, Linux (X-servers)
RDB server	Linux
Web server	Linux

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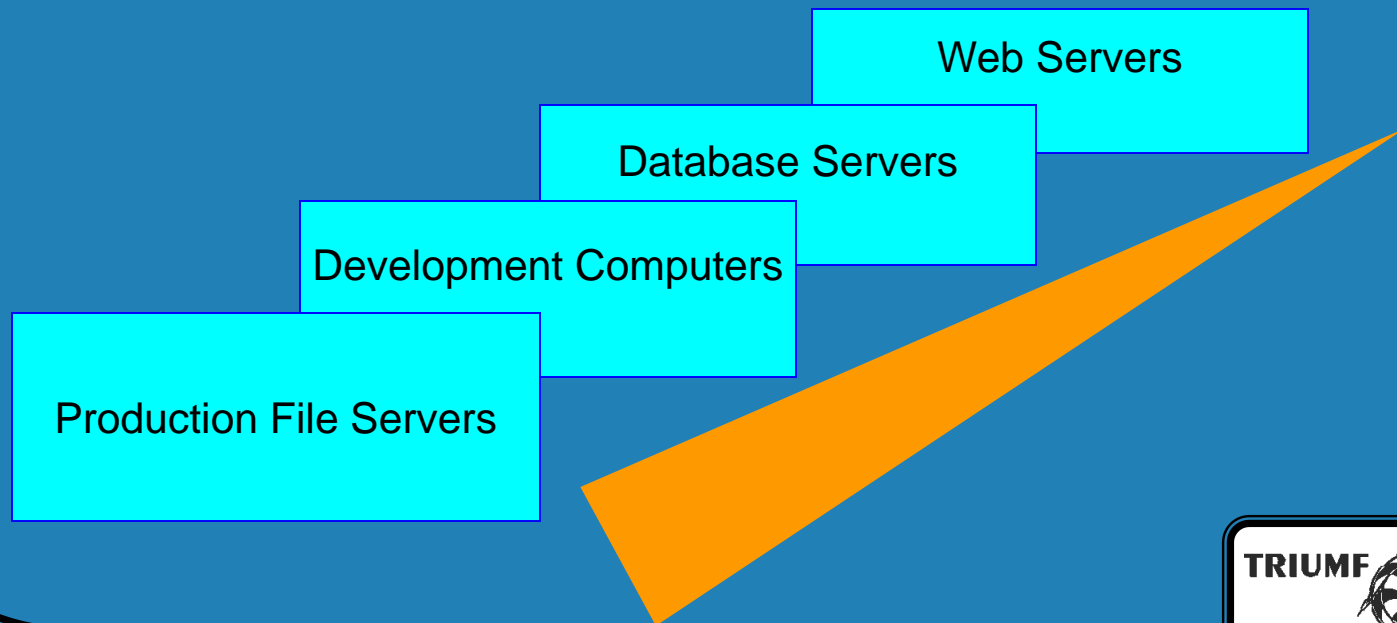


Relational Database



Basic Ideas

- Collaborating tools
- Loose coupling
- Minimize mission-critical items



Relational Database (PostgreSQL)

- Device classes
 - Capfast
 - I/O ports
 - Macros
- Device instances
 - Hardware addresses
 - Macros
 - Interlocks
- Hardware info
 - PLC drops
 - VME crates
- IOC info
 - Boot area etc.

WebApp integrates RDB+Tools

- generate Capfast schematics (device instantiation)

- generate dm device control panels

Interlock display

hyperlinks to other device control panels

verify interlock implementation

build configuration scripts (Capfast)

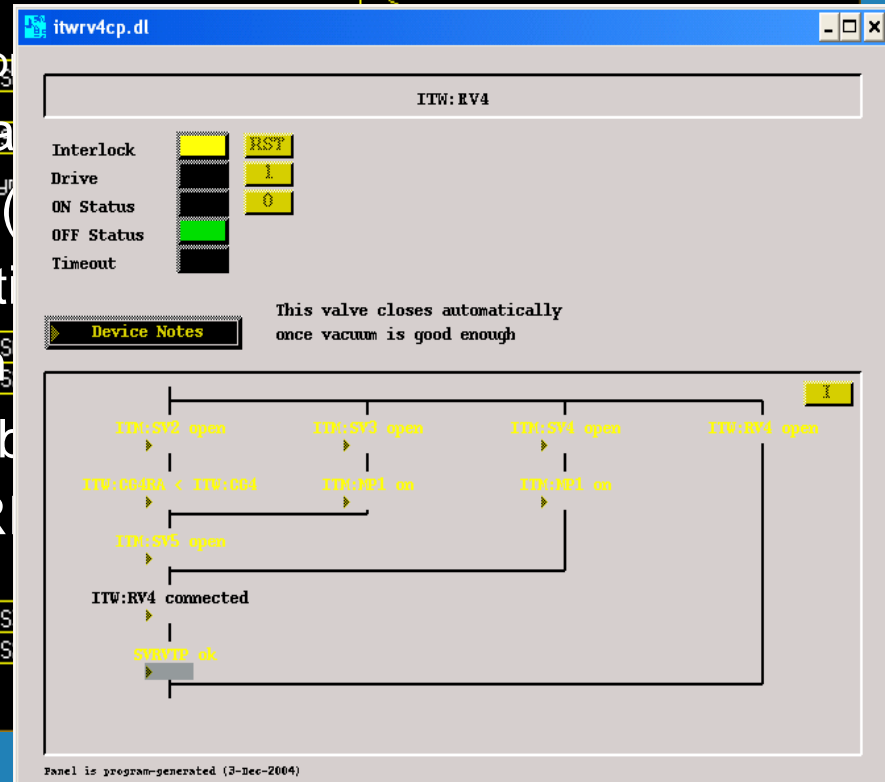
generate html documentation

manage IOC configuration

Interaction with other data

.db crawler (off-line – no RDB)

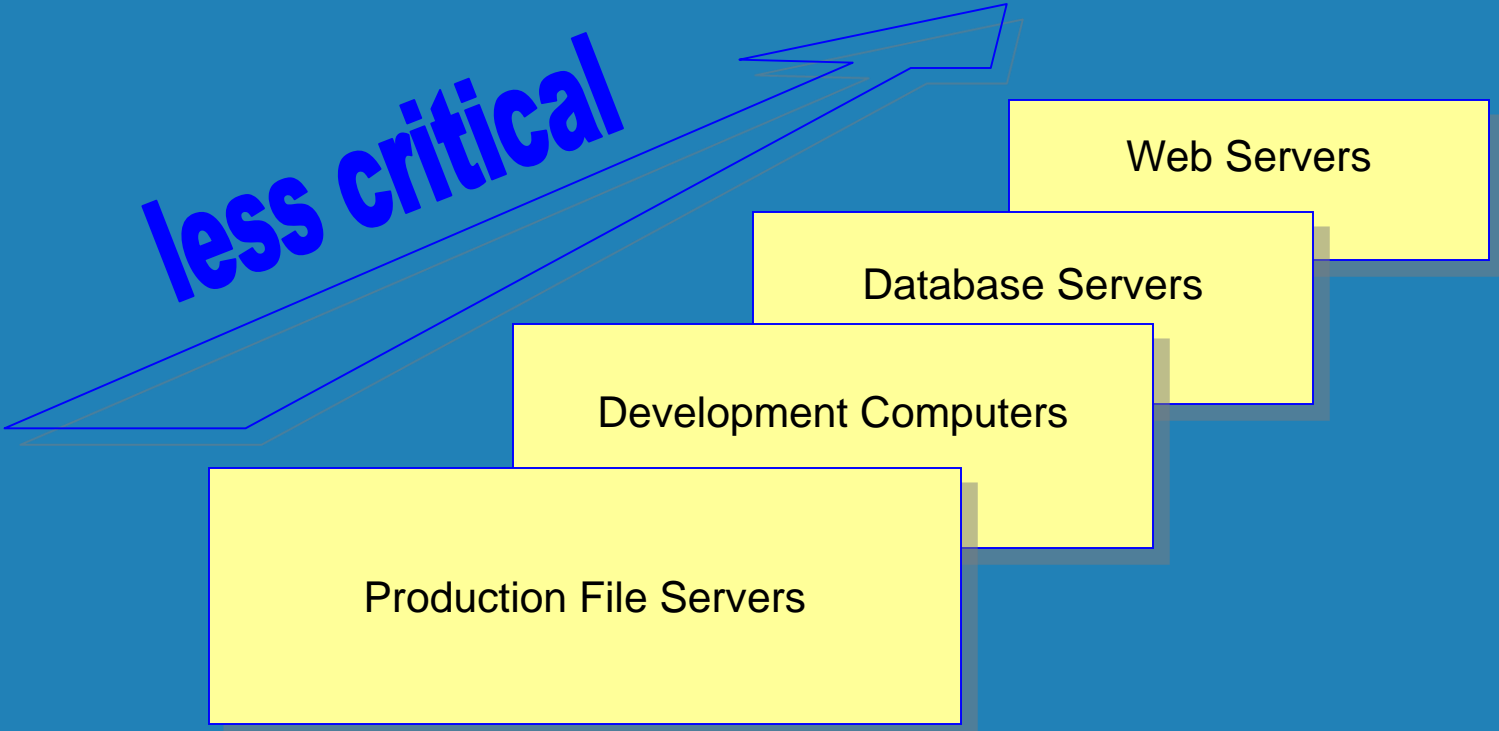
ddl file crawler (no RDB)



What's next (missing)

- Configuration scripts?
 - Request files?
 - Cables etc.
 - Device locations
 - Integrate with module asset RDB
- IRMIS?

less critical



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