

Discussion of the new DNS generation system

DNS Operations SIG

APNIC 18

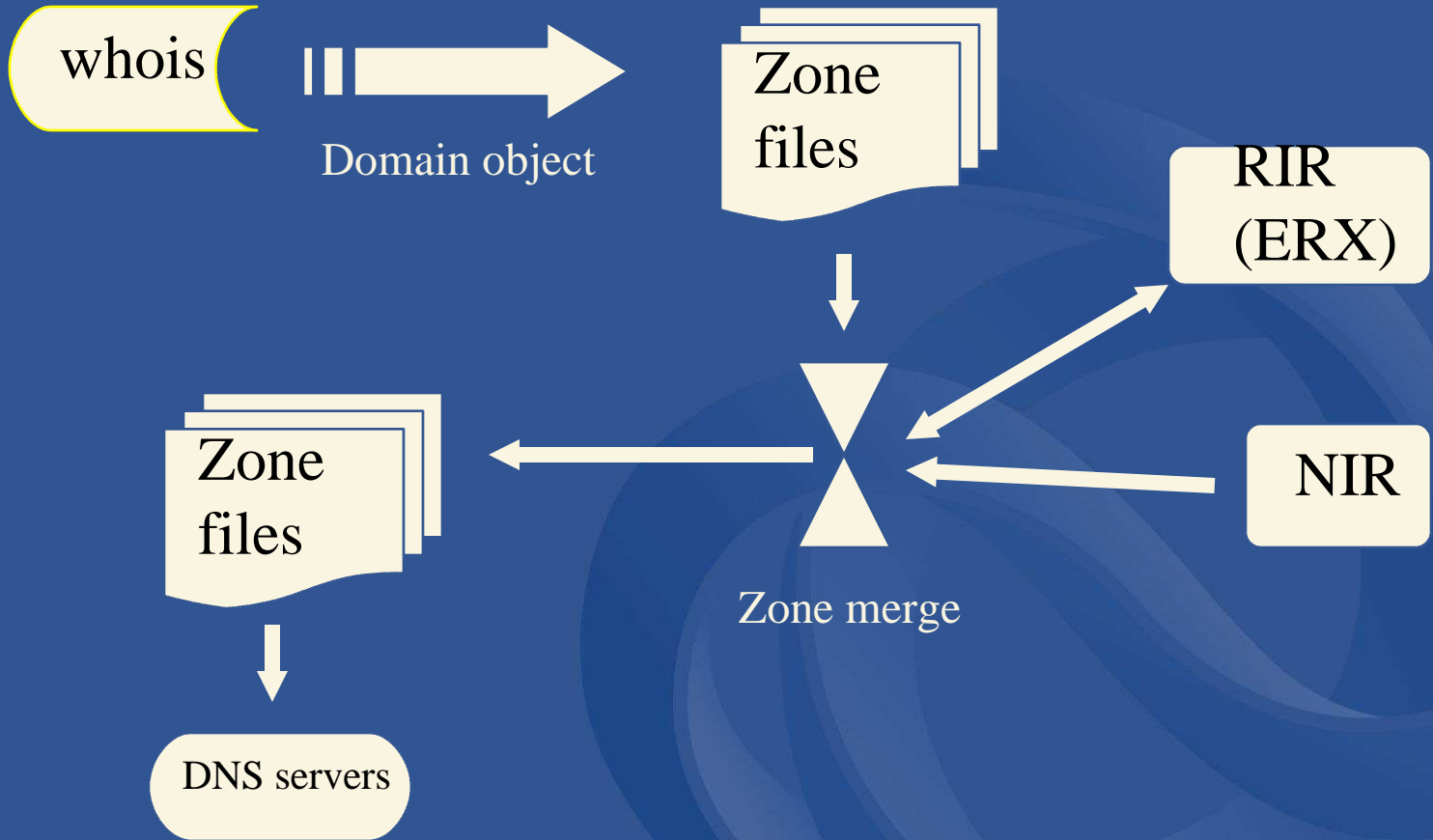
2nd September 2004, Fiji

Overview

- Current DNS Generation process
- The New Process
- Implementation Status
- Future Considerations
- Discussion



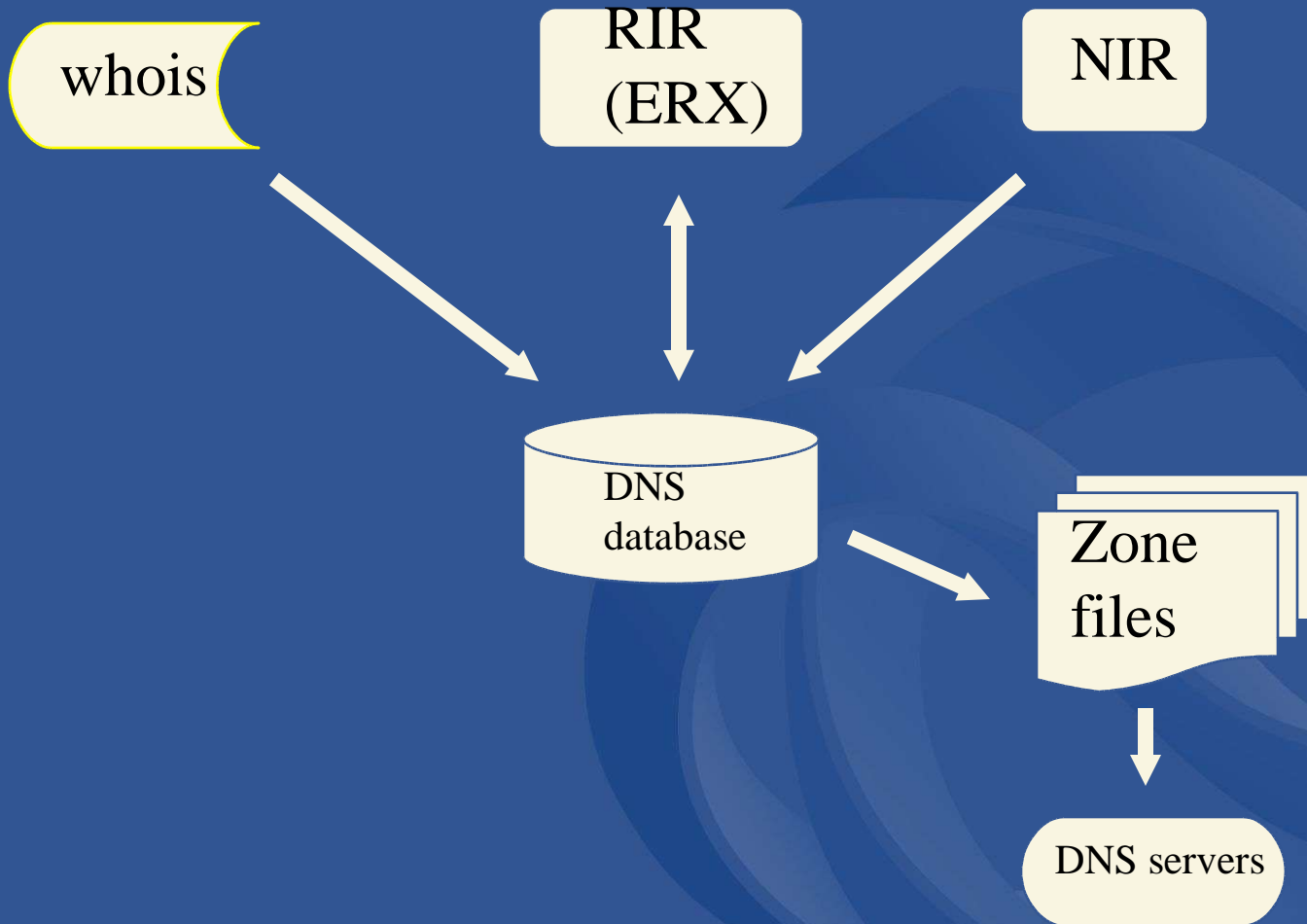
The current process



The current process

- Zones are a composite of:
 - WHOIS data (domain objects)
 - “zone-lets” received from NIR/RIR
- Zone generation takes 27minutes
 - (mostly data fetch delays)
- Zones valid, but ‘dirty’
 - /24 records in addition to covering /16
- Manual zone addition process
- Not scalable

The new process



The new process

- Benefits
 - All inputs pre-validated
 - Zone generation under 1 minute
 - Zone management improvements
 - Lame delegation synergies
 - Future flexibility (SECDNS)
 - Zone consistency
 - ‘Cleaner’ zone files
 - Removal of manual processes

Implementation state

- 95% functioning
 - Makes zones, not yet published to NS
 - No Management interface
- Zone state comparative testing
 - (against current system)
- Expected deployment date:
 - End of Nov '04

Future considerations

- DNSSEC support
 - How to maintain delegates DNS KEY?
 - How to re-sign zone?
 - Ongoing coordination with RIR/NIR
- In-addr.arpa glue
- Direct update from stakeholders
 - Per delegation record!
- Dynamic DNS

Discussion?