

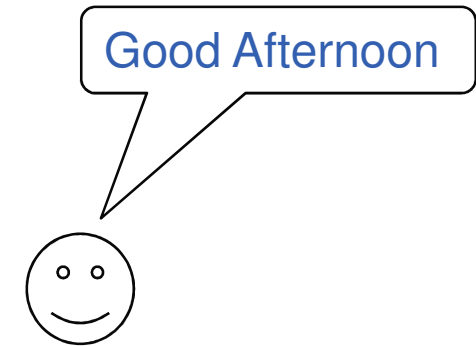
# The Staged Roll-out in the Transition EGEE→EGI

*Antonio Retico*

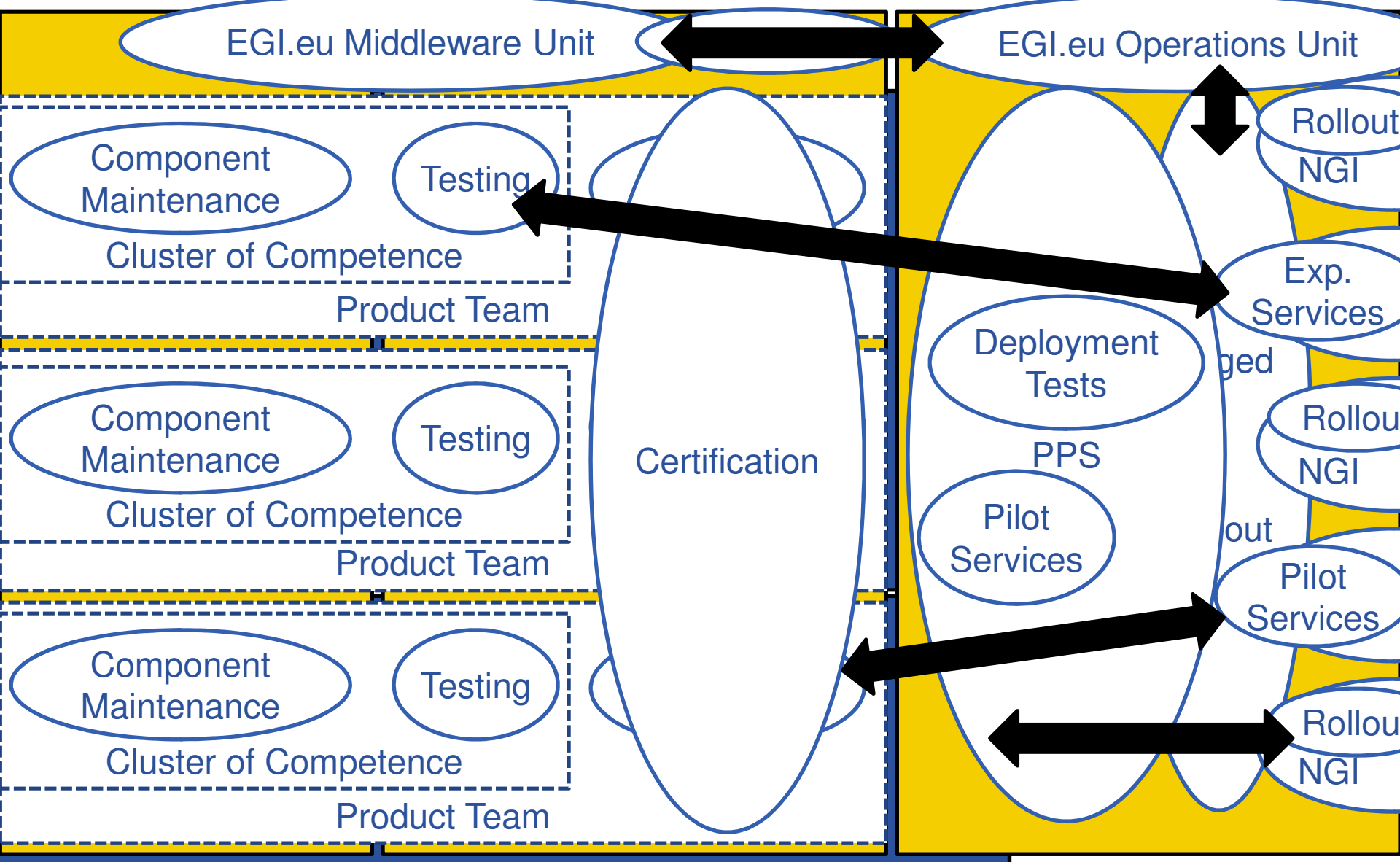
**EGEE09**

**Barcelona – 23 Sep 2009**

- **The Staged Roll-out in the EGI development and deployment model**
- **The Staged Roll-out in the SA3/SA1 implementation**
- **Some technical considerations**
- **Highlight on the status of the transition**



- **A bit of context**



- **MW products developed and tested by independent “Product Teams”**
- **Release to EGI (production) → SW released by Product Teams into “Beta” repository**
- **A thin “validation” layer featured by the EGI.eu Middleware Unit (MU) → “green light” → staged roll-out**

- **A process for MW staged roll-out is to be implemented**
  - Deemed necessary by SA1, SA3 and WLCG Management
  - Protection mechanism for the production service
  - Applies to all MW updates
- **Not a surprise for Operations people:**
  - Local “buffering” solutions already applied at various regions and sites
  - The new idea is to share the results
- **Implementation: work in progress [4]**
  - Part of the EGEE→EGI transition
  - Currently using PPS resources to validate the new procedures

- **How we (will) do it**

- **A MW release v.N+1 is announced to the rollout sites by the MU.**
- **As defined by their SLAs sites are expected to update ‘their’ services and to report on failures within the SLA specified time period**
  - If no issues filed within SLA period the release is ‘good’ for wider deployment
- **Staged roll out is not a compulsory waiting time: sites can skip the waiting time and proceed before, under their own risk**
- **Staged roll out is transparent for the product teams, for them, the component is released in production once it is given to the MU**



- A MW release v.N+1 is announced to the rollout sites by the MU.

To whom?

How?

When?

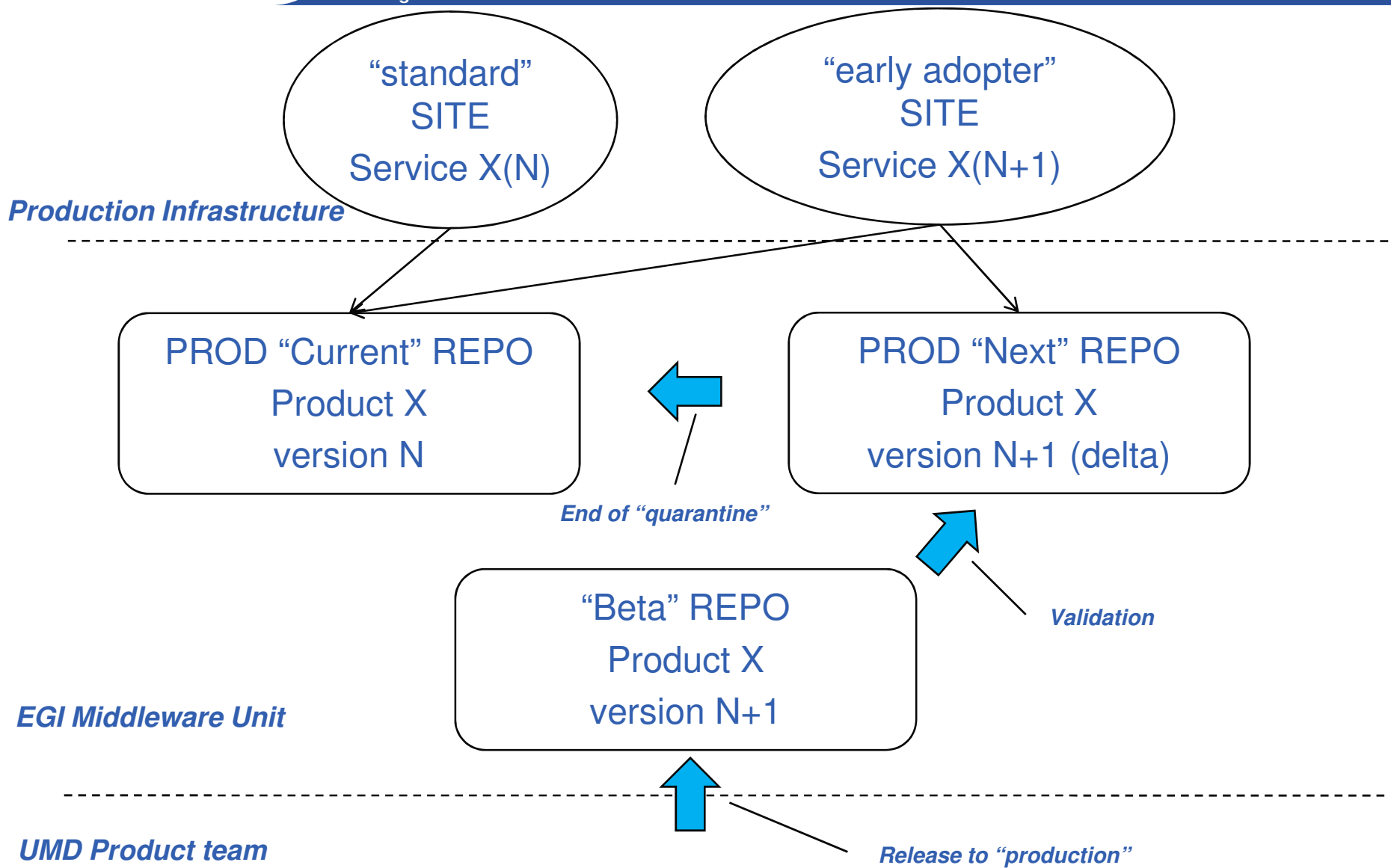
- A MW release v.N+1 is announced to the rollout sites by the MU.
- **Early Adopters sites are a club of production sites that commit with EGI to provide this service (OPT-IN approach)**
  - Collaborative effort of NGIs
  - Trade-off : receive release earlier at the price of instability risk
- **Communication and announces to EA sites happen through formal deployment tasks**
- **The release pages for v.N+1 are ready but not public default yet**
  - Default release pages stop to Update N (stable release)
  - **Link to N+1 pages provided** for sites that want to upgrade(at their own risk)

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How?

SLA?

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- **Updates of the EA sites through “delta” sw repository**
  - Two operational repositories “Current” (stable) and “Next” (newer version)
  - Both run by MU on behalf of OU
  - “Next” contains the final production package (e.g. not pps-\* meta-pkg)
- **Deployment issues reported through the task report**
- **Operational issues reported through standard channels (e.g. GGUS, Savannah)**
- **SLA**
  - Time for upgrade 1 day (tunable)
  - Quarantine: ~ 3 days / 1 week



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*Otherwise?*

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- **If there are issues (e.g. major problems introduced by the update)**
  - “Next” repository is emptied and the update is rejected
  - EA sites (still production sites) need to roll-back (not necessarily simple, support may be needed by MU)

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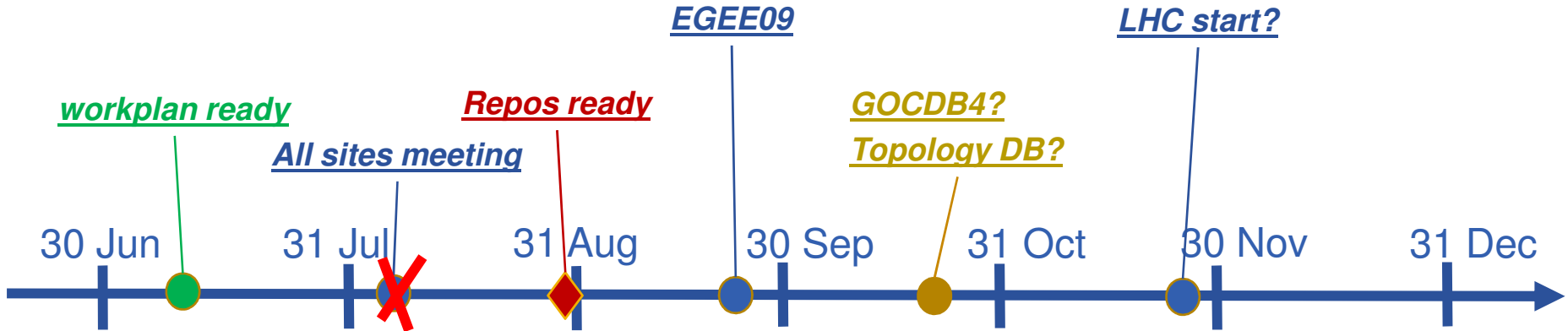


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- **Some technical considerations**

- **Requirement: production repository in a consistent state, always**
- **Staged Roll-out process flexible wrt to implementations**
  - No assumptions on the structure of repos
  - No strong assumptions on version naming conventions
  - BUT logistics rely a lot on current Savannah “jra1mdw” patch configuration
- **But we can give advice**
- **Process inherently sequential (leap-frogging not allowed)**
  - while staged roll-out of v.N+1 is pending v.N+2 has to wait (or obsolete it)
  - Exceptions (e.g. critical security patches) manageable by increasing the release number of version N (e.g. 2.1.4-1 → 2.1.4-2)
- **Independent product repositories possibly more efficient (parallel deployment)**

- **Slowly but steadily getting there**



preparation

- ✓ Transition plan
- ✓ Coordination with SA3
- ✓ Requirements for GOCDB4
- ✓ Prepare release documentation
- ✓ Adapt PPS tools

transition 1

- ✓ task-based reporting
- ✓ Populate PPS registry
- ✓ Documentation
  - ✓ Management procedures
  - ✓ Test reports pages
- Start the operations
- Discontinue PPS deployment test
- Sam and GridMap displays

transition 2

- Commitments into GOCDB
- Modify PPS tools
- Transfer resource mgmt to ROCs/NGI

consolidation

- Add more PROD sites
- Interface with regional MW re-distributions

- **[1] EGI: Managing the Software Process**  
<http://indico.cern.ch/getFile.py/access?sessionId=2&resId=0&materialId=1&confId=57092>
- **[2] SA1: proposal and requirements for staged-roll-out of middleware updates**  
<https://edms.cern.ch/document/997514/>
- **[3] SA1/SA3: Staged roll-out of grid middleware: general lines**  
<https://twiki.cern.ch/twiki/bin/view/EGEE/StagedRolloutOverview>
- **[4] SA1: Implementation details and roadmap**  
<https://twiki.cern.ch/twiki/bin/view/EGEE/StagedRolloutSA1>
- **All of them available [on the PPS web site](http://www.cern.ch/pps/index.php?dir=./rollout/)**  
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