

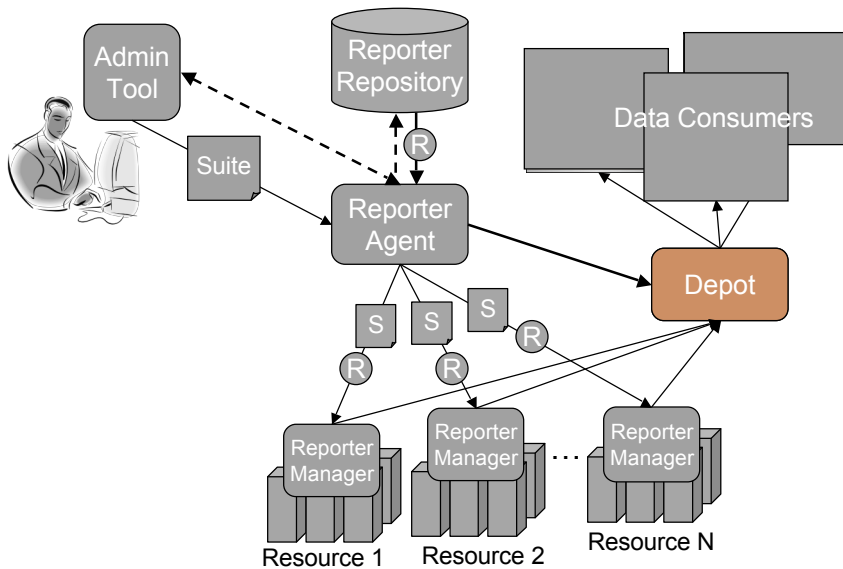
# *Inside the Inca Depot*

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## *Architecture overview*



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## *The Inca Depot*

- **Data repository for Reporter output and Inca deployment configuration**
- **Generally interacts only with other Inca components**
- **Complete redesign from Inca v1**

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## *Outline*

- **Depot v2 goals and design**
- **What's in the Depot?**
- **Depot consumer services**

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## *Depot v2 Goals*

- **Flexible data content**
- **Efficient storage and retrieval of data**
- **Flexible access to data**
- **Data security**
- **Scalability**

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## *Depot v2 Design Choices*

- **Flexible data content**
  - No required schema for report body
- **Efficient storage and retrieval of data**
  - Storage in a selection of databases via Hibernate
  - Schema designed to reduce redundant data
- **Flexible access to data**
  - Access to all data via SQL queries
  - Depot protocol provides predefined queries; extensible
  - Depot retains history of reporter output
  - Queries via Inca protocol and (soon) web service interface
- **Data security**
  - Certificate-based authentication
- **Scalability**
  - Multiple depots organized into a hierarchy (planned)

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## *Outline*

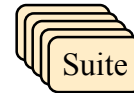
- **Goals and design**
- **What's in the Depot?**
- **Depot consumer services**

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## *What's in the Depot?*

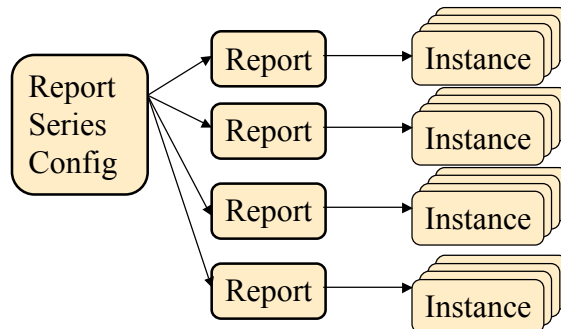
- **Goal: Depot should provide centralized access to all Inca deployment information**
- **Information available**
  - Inca deployment configuration
  - Reporter output

## *Inca Deployment Configuration*



- **Support incomplete; Consumer queries Reporter Agent**
- **Repository/Reporter information not part of schema**
- **Resources defined by schema; as yet unused**
- **Suite info stored and returned as part of reports**

## *Reporter Output*



- **Report Config contains host and signature**
- **Report contains body, stderr, exit status/message**
- **Instance contains timestamp, resource usage info**

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## *Outline*

- Goals and design
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## *Queries*

- **Supported queries**
  - Single instance
  - Latest instance for each series in a suite
  - Report history for a series (soon)
- **Planned queries**
  - Graph image (e.g., series history)
  - General SQL
  - Inca Configuration
  - Plug-in API?

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## *Report Triggers*

- **Register action when incoming report shows problem**
- **Comparitors test reports for acceptable output**
  - Xml schema
  - Regular expression
  - Version
  - Plug-in API (planned)
  - Results stored in Depot
- **Actions**
  - Email
  - Others?