

# GRIA B2B Solutions and Business Benefits

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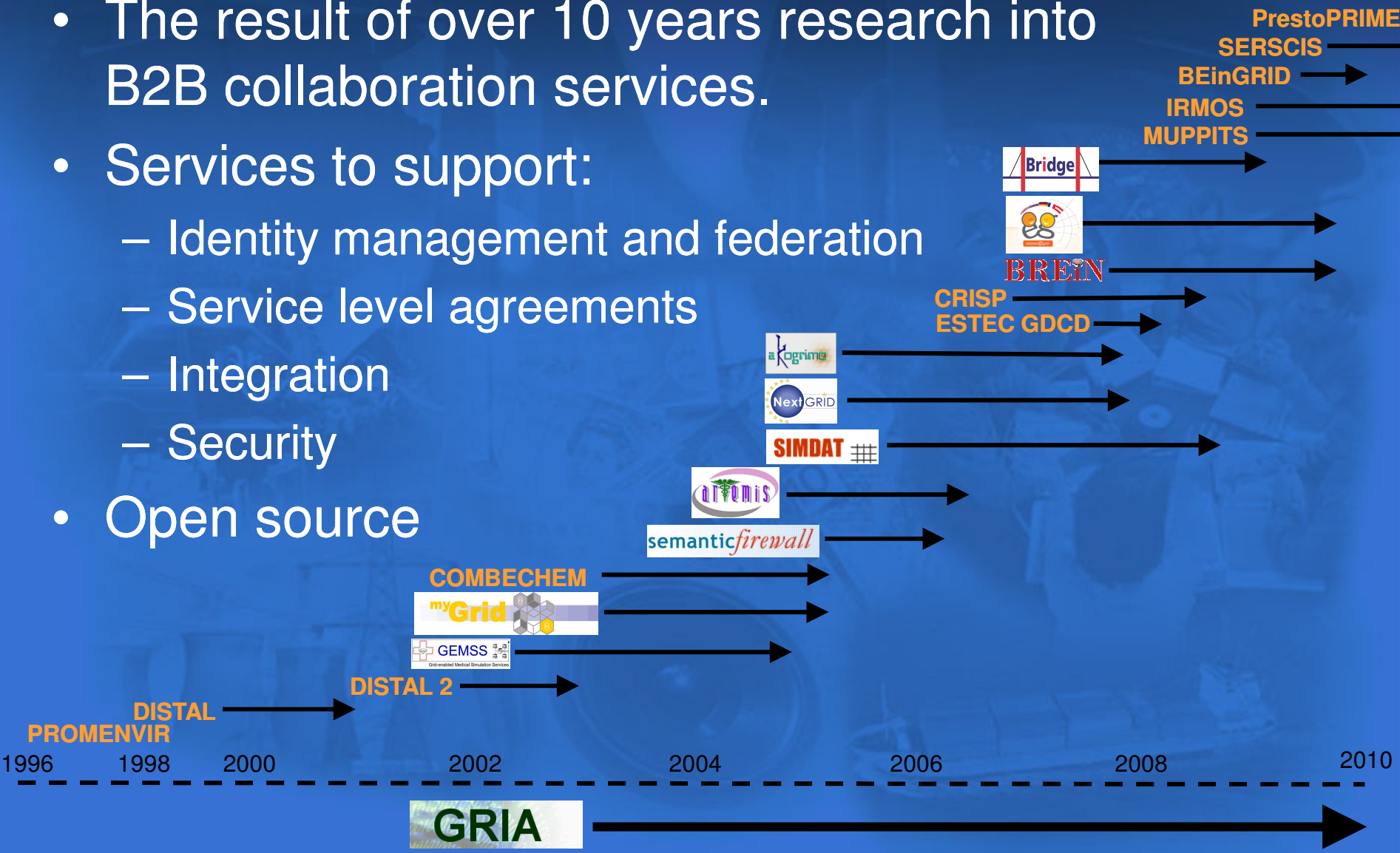
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# What is GRIA?

- The result of over 10 years research into B2B collaboration services.
- Services to support:
  - Identity management and federation
  - Service level agreements
  - Integration
  - Security
- Open source



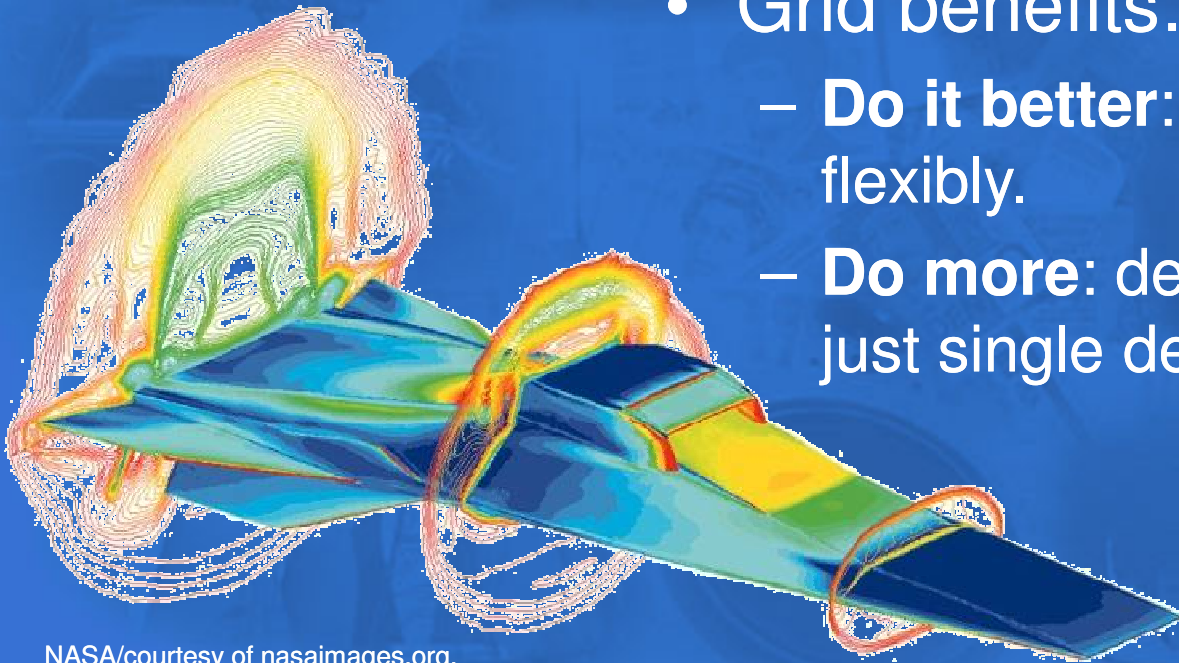
# GRIA in BEinGRID

- GridCAE
- Supply chain mgt for pharmaceuticals
- AMONG
- TravelCRM
- wow2green

Twenty more experiments using other middleware.

# GridCAE

- Providing CFD computation through the Grid.
- ICON, NTUA, EPCC.
- Grid benefits:
  - **Do it better:** faster, cheaper, more flexibly.
  - **Do more:** design optimisation, not just single design verification.



NASA/courtesy of nasaimages.org.

# GridCAE and GRIA

- SLA and accounting:
  - Need to track usage to send the bills.
- Security:
  - X.509 identity management, WS-Security, HTTPS.
  - Authentication, authorisation.
- Integration:
  - Client: GRIA command line client connection to modeFRONTIER shell scripts.
  - Server: GRIA application services providing job submission for OpenFOAM.

# TravelCRM

- Sharing information between travel agencies to improve business intelligence.
- Avantours, GridSystems, IT Innovation, Valadis, Versys.
- Grid benefits:
  - Trust and security
  - Data management
  - Business relationship management



# TravelCRM and GRIA

- SLA:
  - Tracking the data submitted to the pool.
  - Access denied to reports if data is not shared.
- Security:
  - Mapping from portal logins to X.509 domain.
  - Securing customer data.
- Integration:
  - Client: integration with portal through Java API.
  - Service: GRIA OGSA-DAI service interfacing to databases.

# AMONG

- Connecting banks to combat money-laundering.
- Exodus, IT Innovation, NTUA, Piraeus.



- Grid benefits:
  - Secure, managed information exchange
  - Low cost integration



# AMONG and GRIA

- SLA:
  - Soft limit on the numbers of queries per day
  - Notification sent when constraint breached
- Security:
  - WS-Security at message level
  - HTTPS transport layer security
  - Active Directory to X.509 mapping
  - Active Directory group to SAML issuance
- Integration:
  - Client: .NET client embedded in ISS web portal
  - Server: custom GRIA web service connecting to back-end AML software (MoneyWatch)

# Conclusion

- Three of five demonstrators use GRIA – why?
- GRIA provided all that was required.
- GRIA specifically addresses the sustainability issues to ensure cost effective security and QoS management.
  - Business can focus on realising business value and not on maintaining software.
- But this is not enough, we want to:
  - deal with uncertainty,
  - deal with legalities,
  - manage fast-changing deployments,
  - handle convergence.

# Dependability in an Uncertain World

- IRMOS
  - Deployments for interactive real time applications.
  - Tools to predict resource requirements and SLAs to define them.
- SERSCIS
  - Resilient systems for critical infrastructure.
  - Service governance for dynamic systems.
- PrestoPRIME
  - Long term audio-visual archiving.
  - Creating systems to preserve data in spite of hardware changes and failures.