

GCOS 8 IDS/II

Evolution to an Open Data Server

KEN ROSENSTEEL

Product Manager, GCOS 8 Interoperability

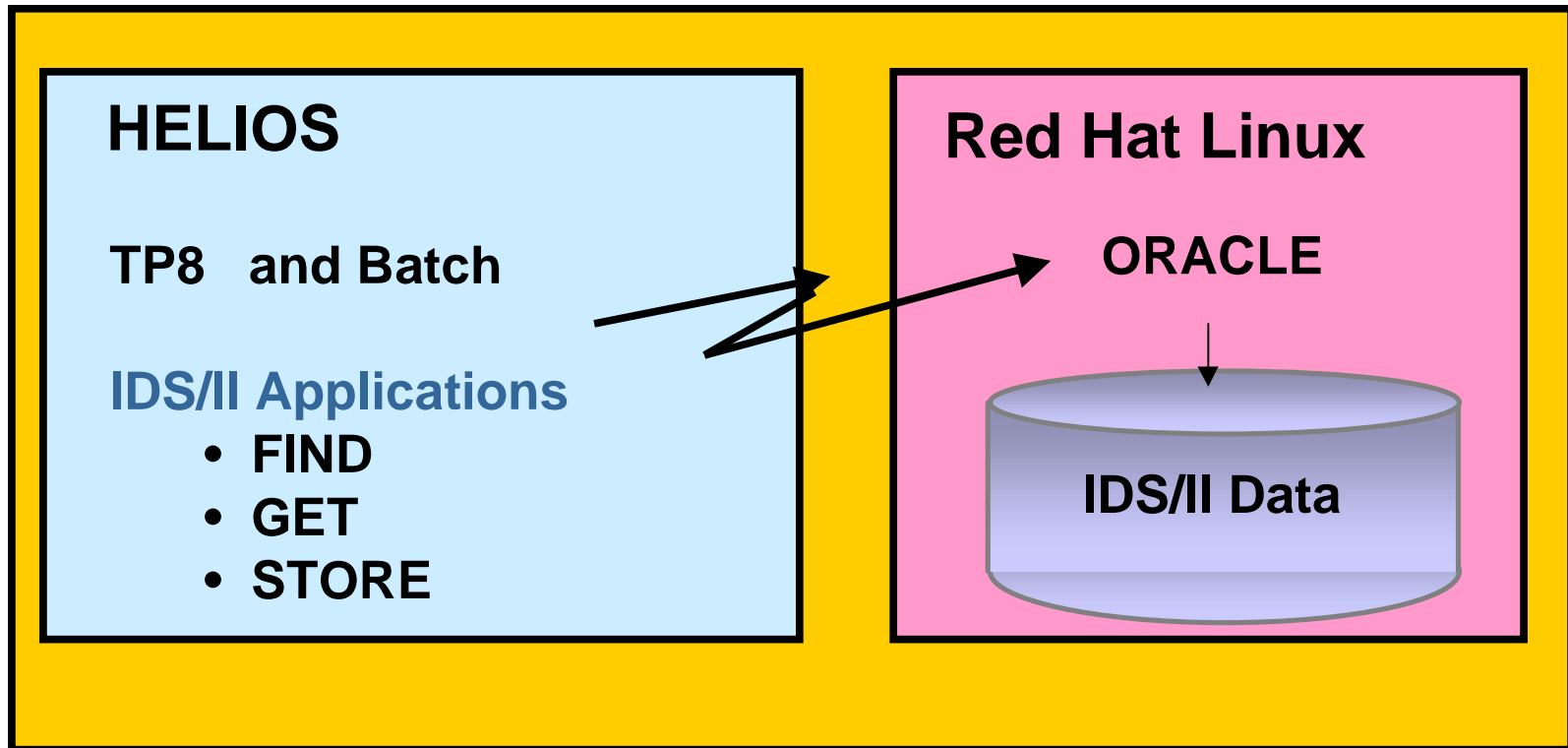


Relational Access Processor for Integrating Data

- New Tools for Developing the **RAPID** system
- Use of Helios / NovaScale and Oracle for seamless database environment
- IDS/II Data stored in Oracle format
- Usage of **RAPID** from **unchanged** GCOS 8 IDS/II TP and Batch applications

IDS/II Reinvented

NovaScale



Technology Breakthroughs

- GCOS IDS/II Applications – unmodified – access the **RAPID** system
- Tools to Create the **RAPID** system from an IDS/II Database
- Database Unload / Load programs automatically generated



Customer Benefits

- **Clean up the existing IDS/II Database Content**
 - **Redefine record layouts and content**
 - **Combine Schemas**
 - **Remove outdated content**
 - **Normalize Database**

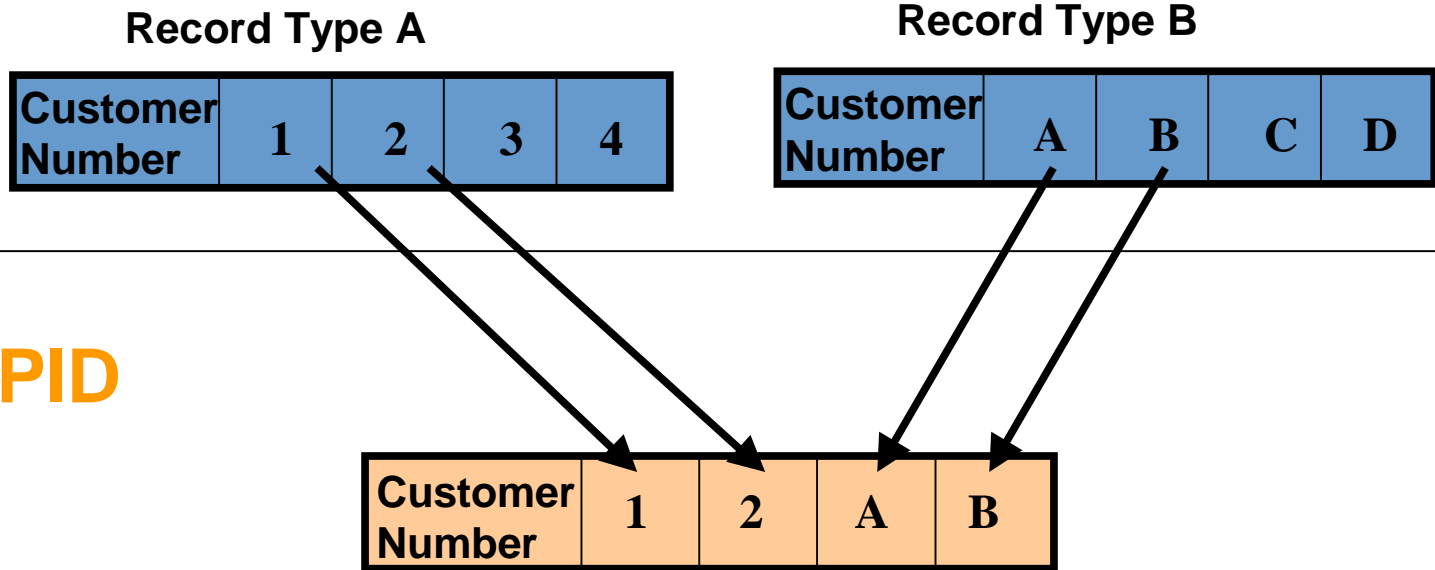
- **No impact to existing GCOS 8 production applications**

- **Open the IDS/II Database**
 - **Concurrent access from Open System Applications**



Database Normalization

IDS/II Database



Open System Usage of **RAPID**

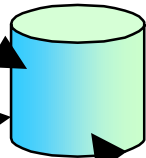
GCOS

Open System

Using contemporary tools, new applications can be built or extensions added that access the **RAPID** system

Application 1

Application 2



RAPID database

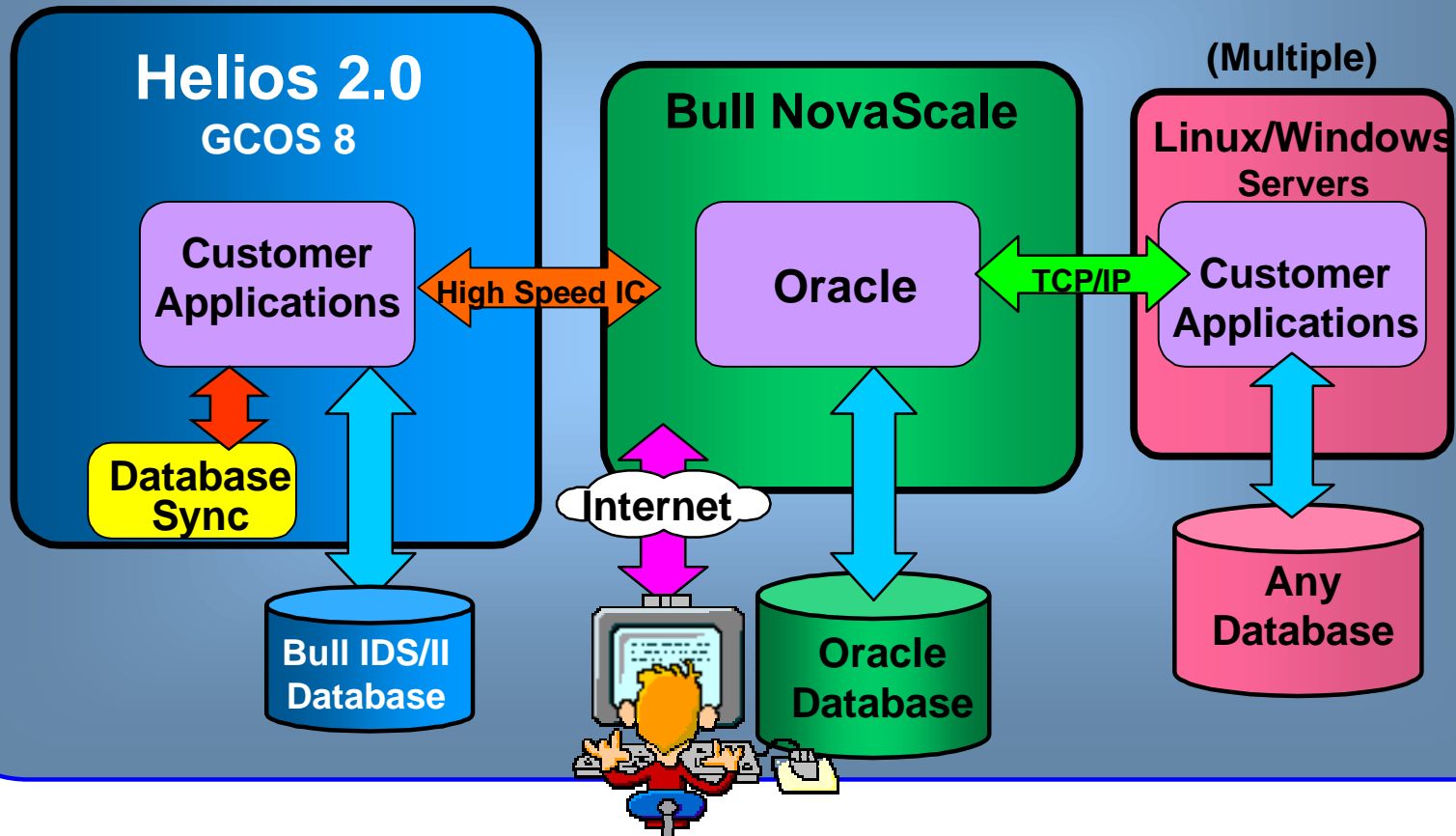
New Application



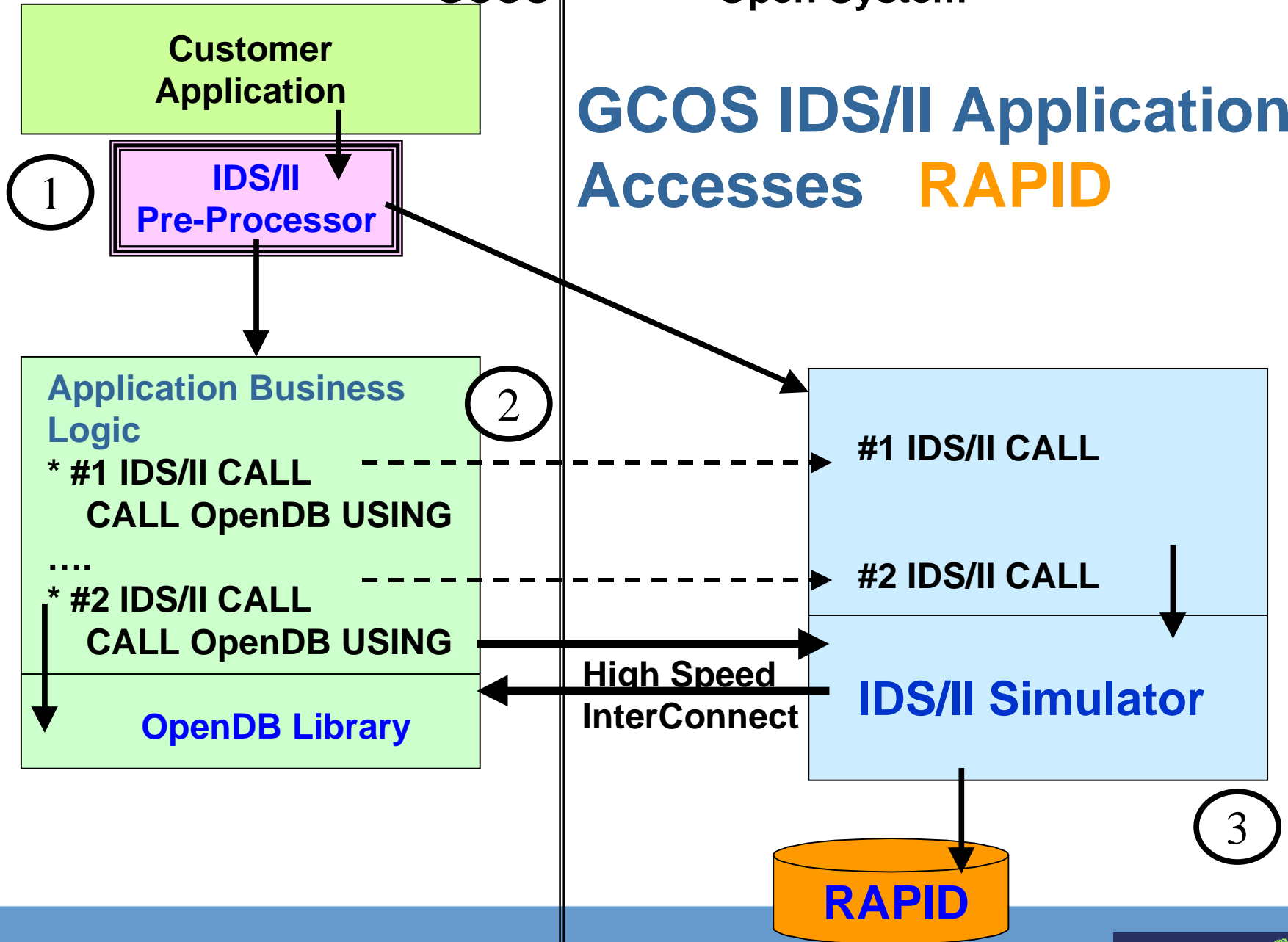
Sharing Enterprise Data

Consolidated Production Database

- Centralized GCOS 8 Applications
- Customer Internet Data Access

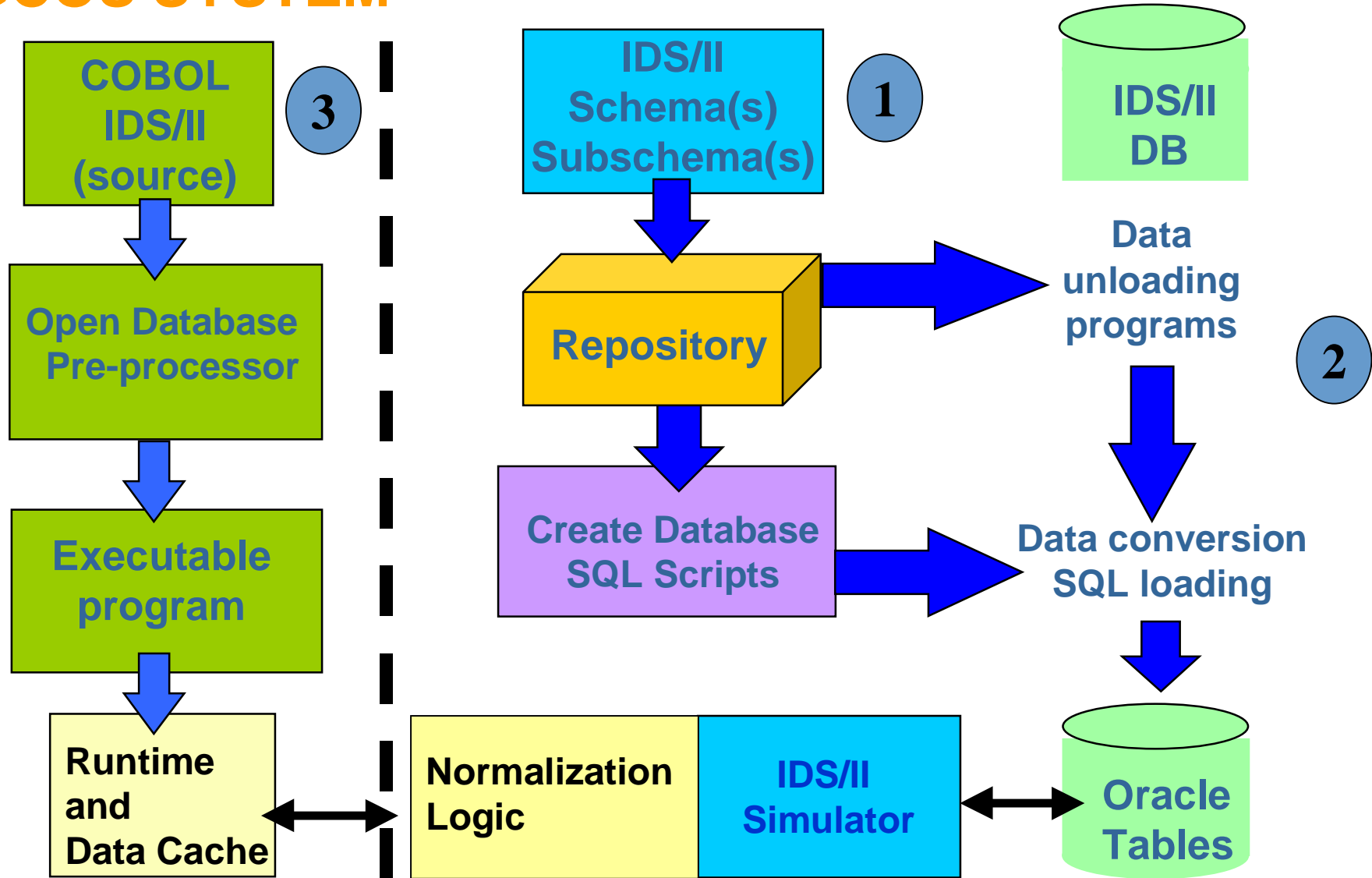


GCOS IDS/II Application Accesses **RAPID**



The Details

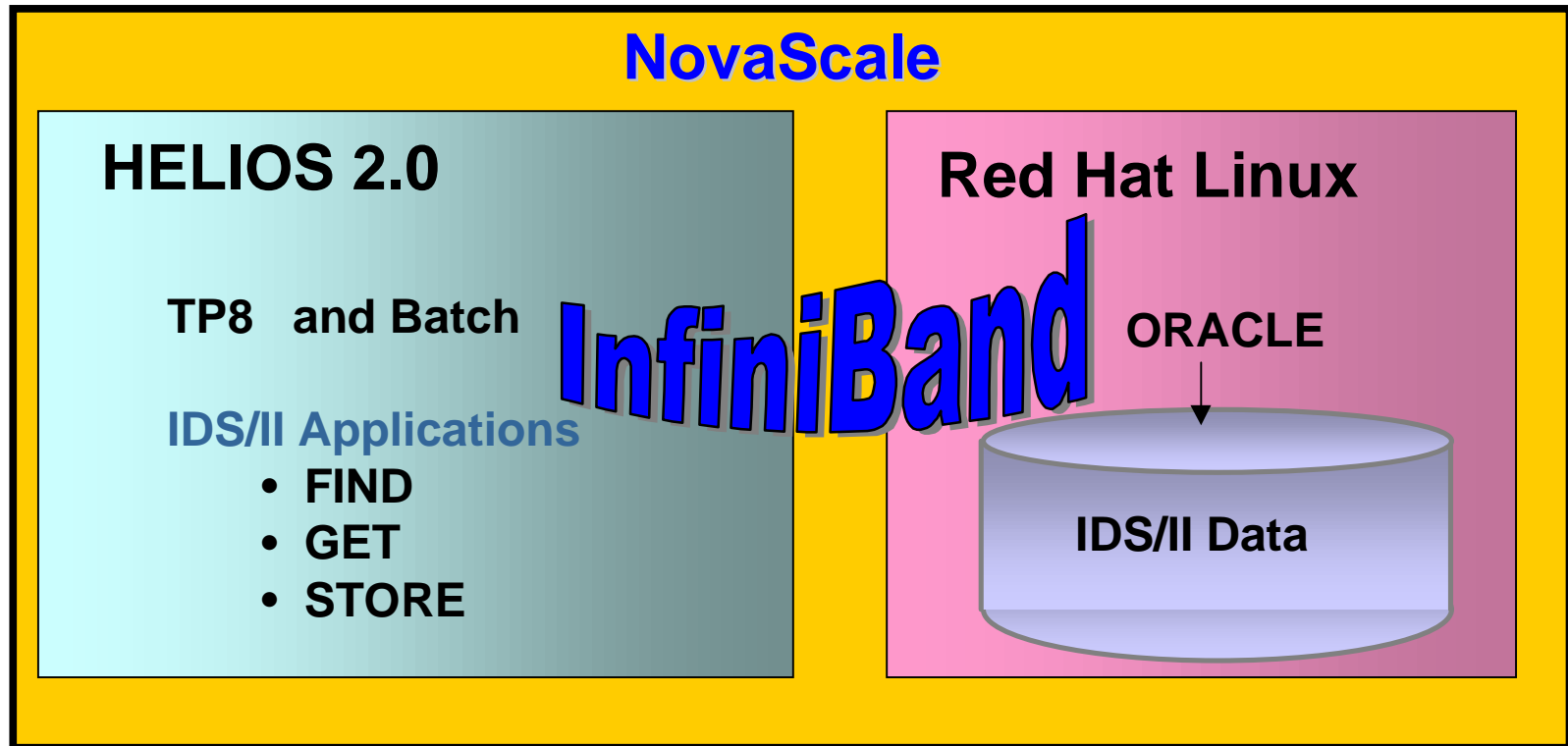
OPEN SYSTEM



Execution Performance

Driven by High Speed InterConnect

- Two partitions linked with 10 μ s InfiniBand InterConnect



Performance

- **Two IA64 servers coordinated through high-speed Infiniband**
 - Very low-latency InterConnect
 - Cluster technology used for Oracle and DB2

- **Data Cache on GCOS**
 - Read-Ahead on SETs and AREAs, returning cached data to DBSP runtime on GCOS
 - Currencies for all objects
 - Find/GET combination

- **Batch elapsed time and TP response time approximate IDS/II applications**



Summary

- Evolution of IDS/II to an **Open Data Server**
 - Accessible by GCOS 8 Applications
 - Concurrently accessible by Open System Applications
 - Centralized Database for all IT
- Clean up the existing IDS/II database Content and Structure
- Usage of the **RAPID** system from **unchanged** GCOS 8 IDS/II TP and Batch applications
- Controlled Pace and Low Risk Application Evolution toward Future IT Architecture
- Made Possible through Advances in Helios and NovaScale Implementation
- Contact the GCOS 8 Competency Center to arrange a discussion or demonstration



GCOS

a long term commitment from Bull

