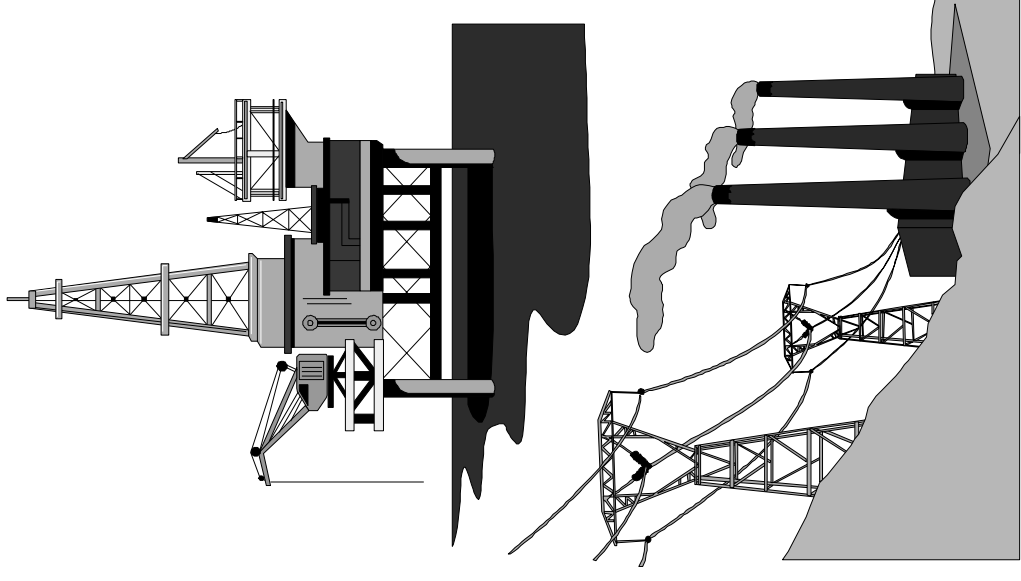
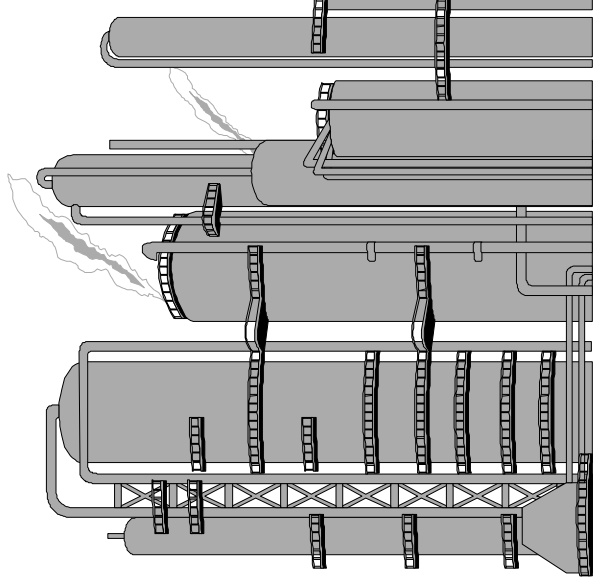


Process History Database

Introduction



Lesson Objective

Objective

Identify PHD system hardware and software components and their interrelationships.

Topics

- Role of PHD
- System topology
- Major software components
- Client/Server Communications
- System data flow

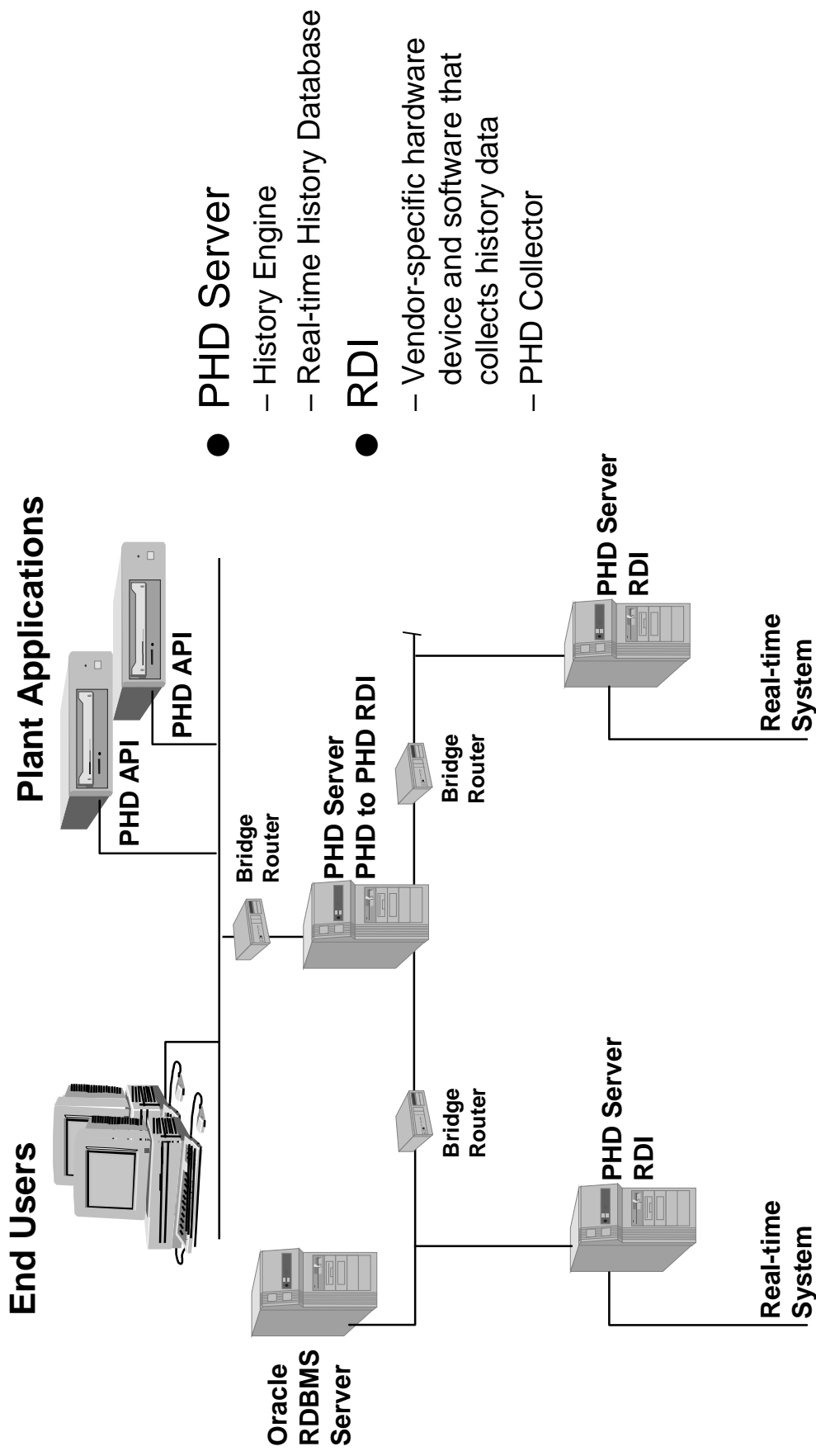
The Role of PHD

PROCESS HISTORY DATABASE (PHD) collects, integrates and maintains a history of real-time continuous and discrete production, process performance, and process-related data.

The role of PHD is to:

- Integrate all real time process and process related data.
- Provide a consistent and common base of process and process related information to applications.
- Manage the historization and archiving of process data.
- Provide a single controlled interface to DCS and SCADA systems.
- Provide process calculation and trending capabilities.

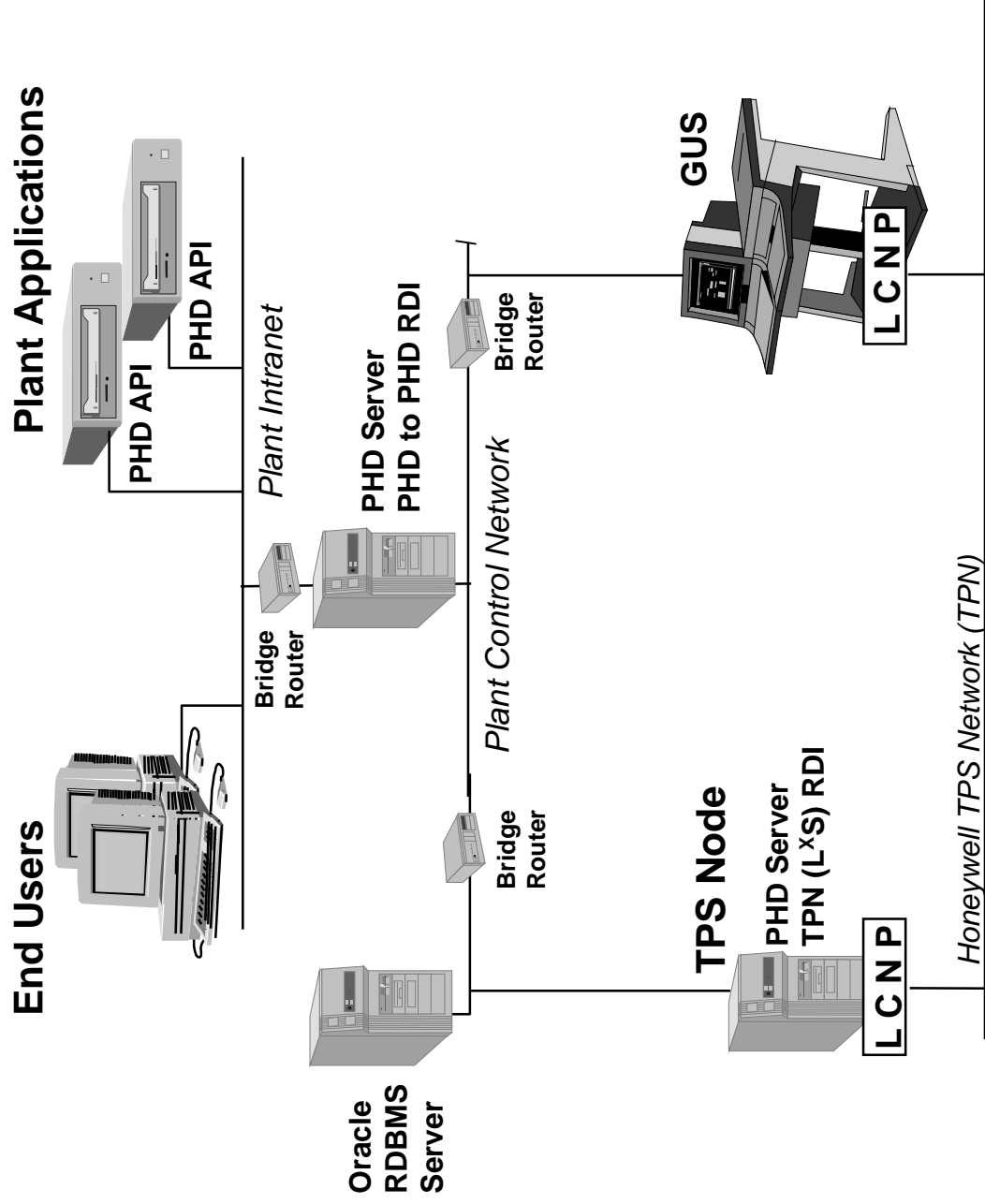
PHD System Topology Example



RDBMS - Relational Database Management System
RDI - Real-time Data Interface

Refer to the **Uniformance Database Specification and Technical Data** for platform requirements (located on the Uniformance documentation CD).

Example Using Honeywell TPS Node



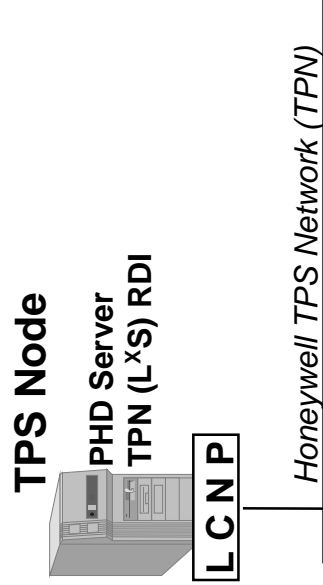
LCNP - Local Control Network Processor
TPN - TotalPlant Network
TPS - TotalPlant Solution

Introduction

PHD RI50

P51751.13 10/99

Configuration of TPS Node (APP or GANT)



Software:

- NT
- AM for Windows (amw) personality image loaded into the LCNP.
Depending on the setup that is executed, *APP* or *amw* appears as the node type on the System Status display.
- AM External Load Modules:
AMCL06_2 - Subroutines supporting access to NT apps.
XACCES - To Enable/Disable writes of TPS data from NT apps.
XOPTN - Required for File Transfer and Journal Access functions.

Other Requirements:

GANT - LCNP2 APP - LCNP4
Must have Domain Controllers on the network
Must be in a TPS Domain

NCF Configuration for AM:

AM Units - Assign at least one unit. PHD does not care what unit you use.
User Memory Allocation - Defaults are OK.
External Load Modules - You do not have to load XACCES unless you want to be able to write to the LCN.
HM Volume Configuration - Use AM default checkpoint size (1 block).

References:

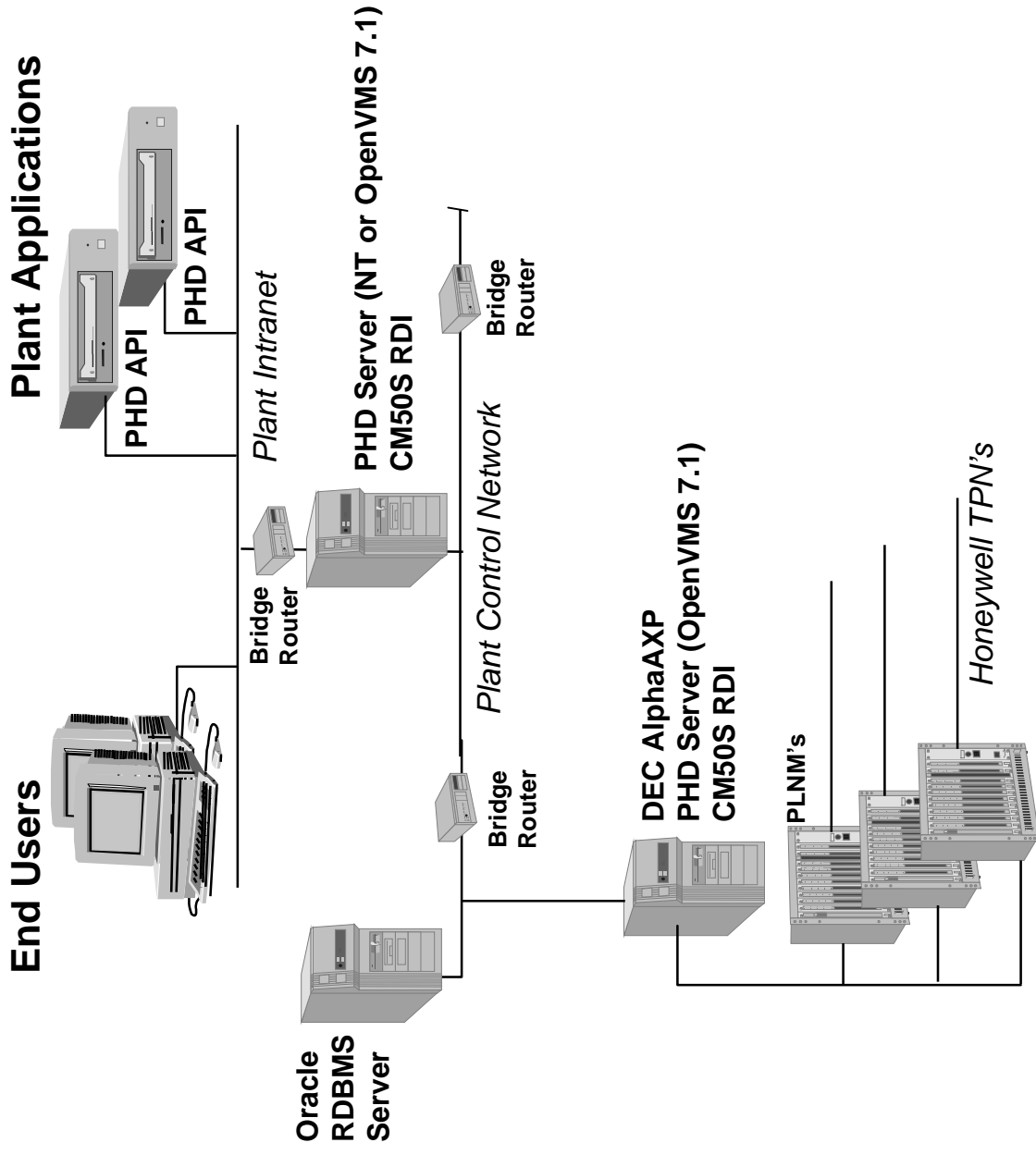
APP node - *TPS Implementation Guide* (available on the TPN/GUS/APP Electronic Documentation CD)
GANT node - *TPS Node with AM Personality (amw) Customer Release Guide*

Introduction

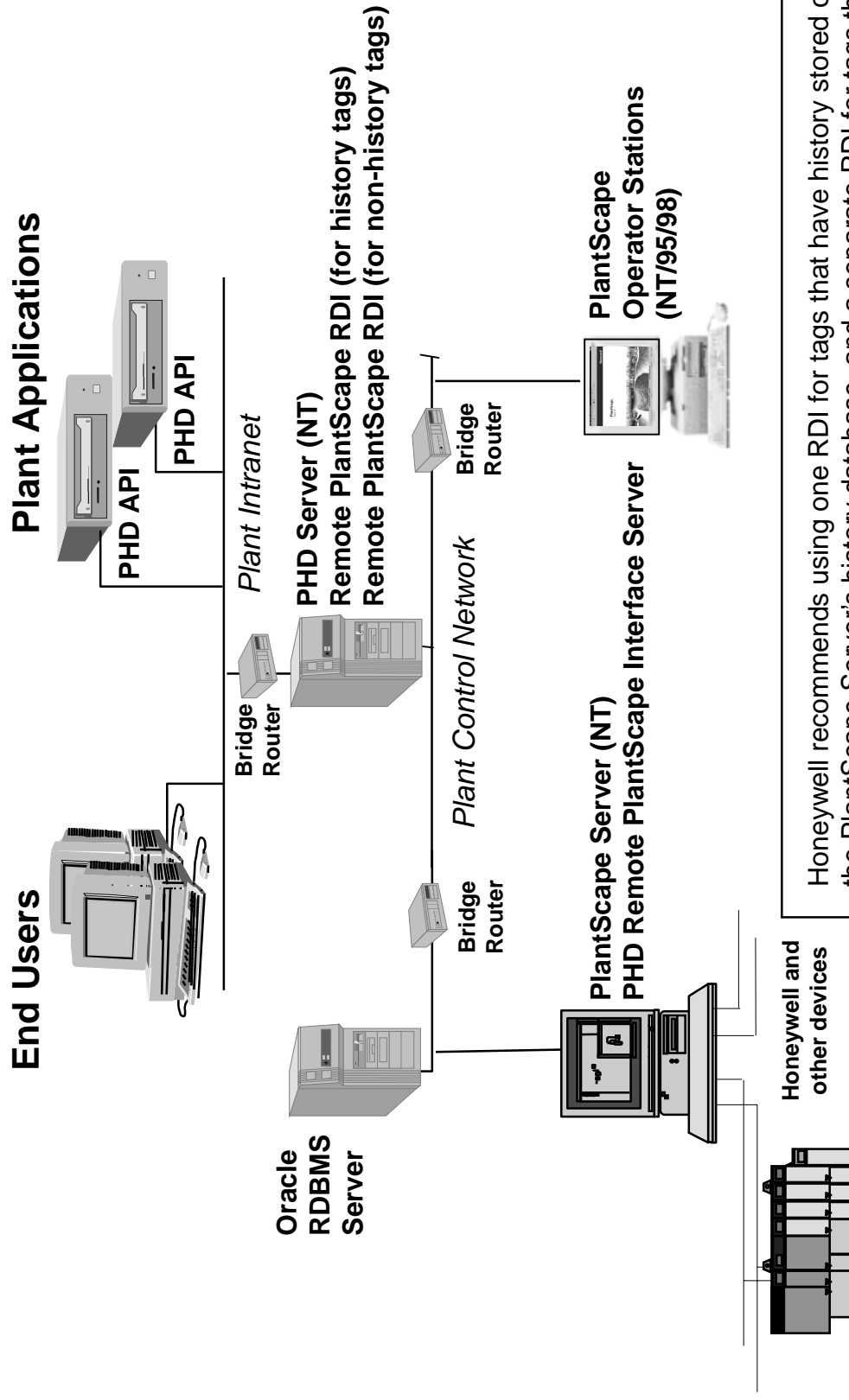
PHD RI50

P51751.13 10/99

Example Using Honeywell CM50S

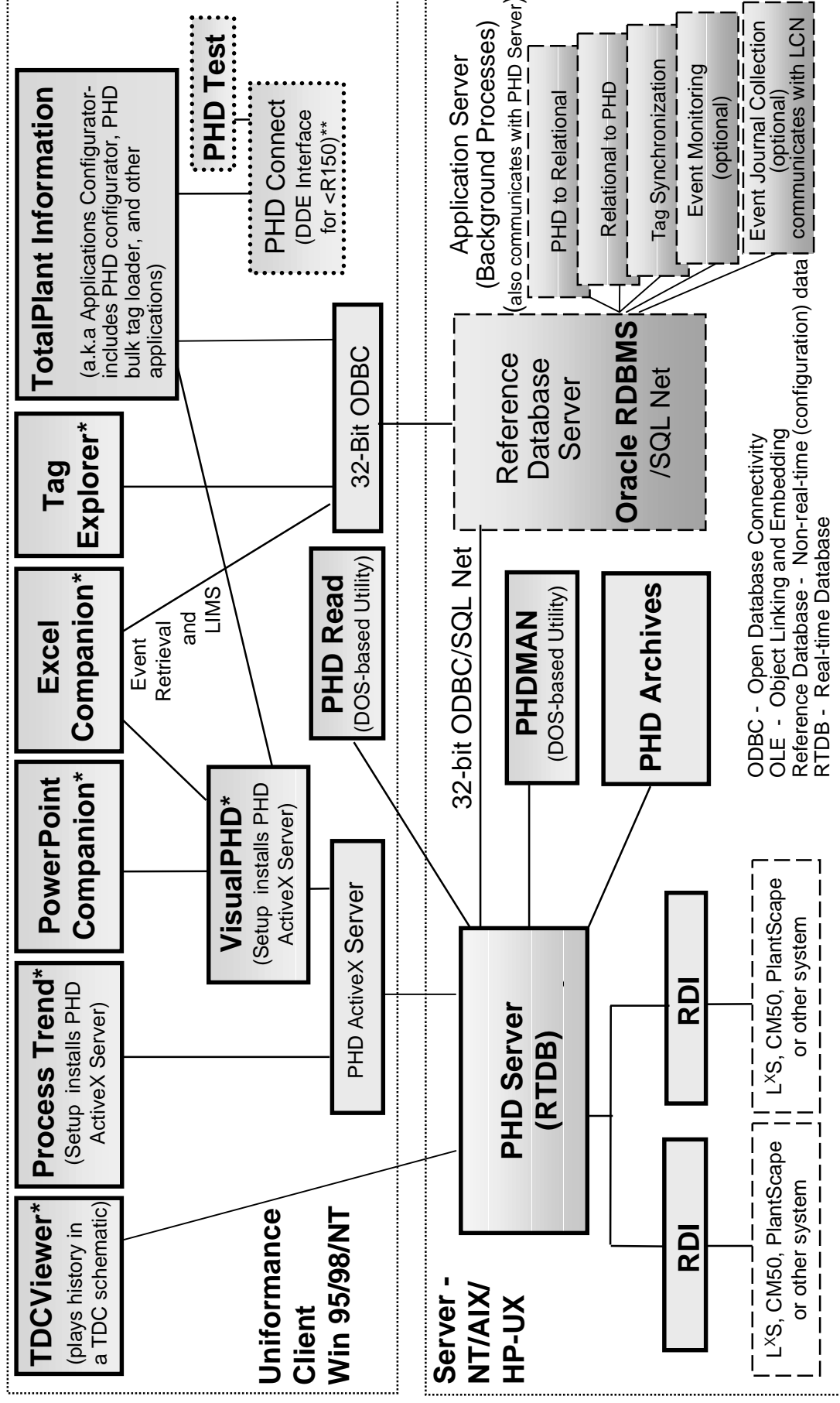


Example Using Honeywell PlantScope System



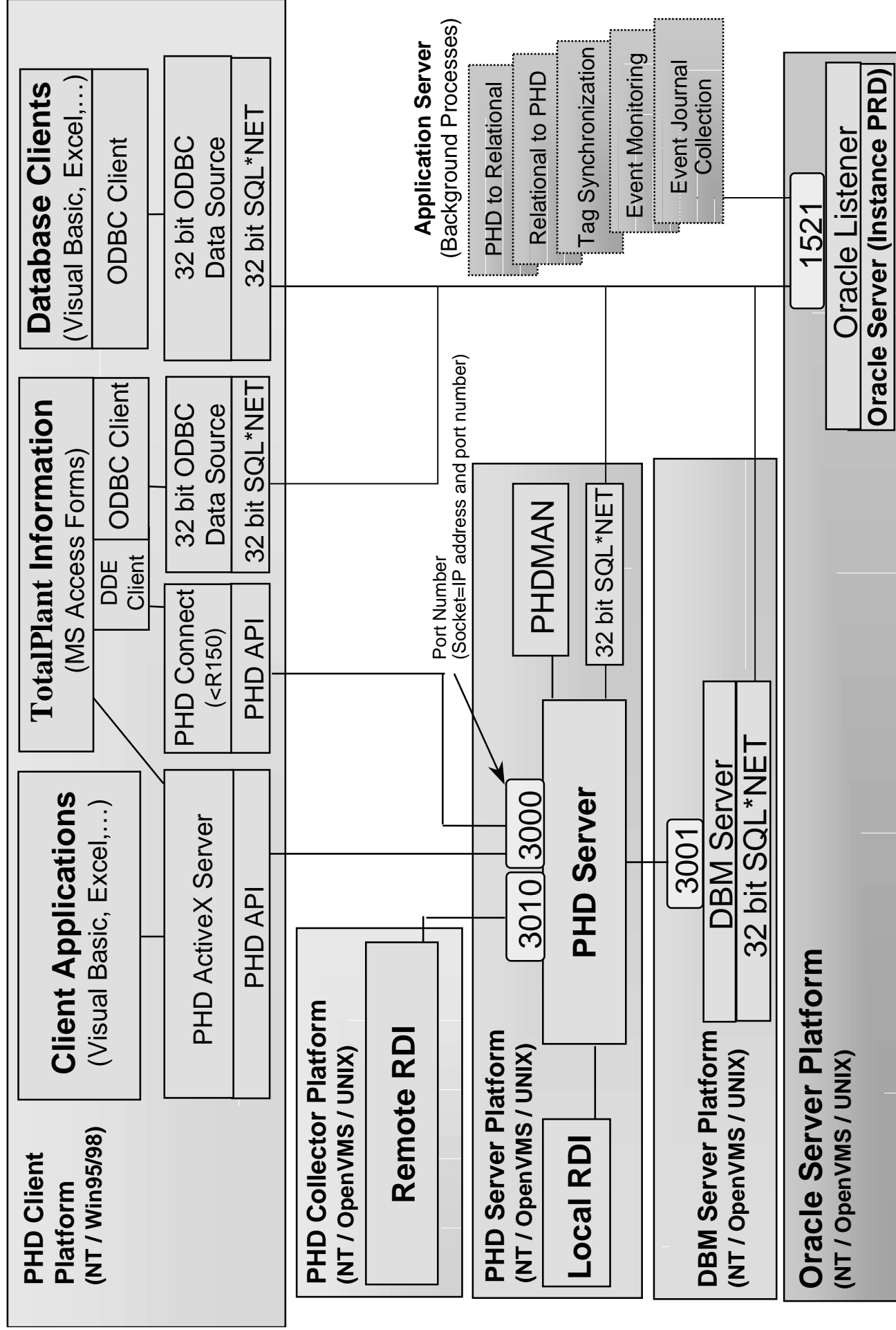
Honeywell recommends using one RDI for tags that have history stored on the PlantScope Server's history database, and a separate RDI for tags that are not stored on the PlantScope Server's history database. The advantage of having two RDIs is that upon RDI startup, the data for non-history tags can be collected without having to wait for history recovery to complete.

PHD System Components Diagram



* Uniformance Desktop components

**For R150 and later, PHD Connect functionality is replaced by the VisualPHD ActiveX Server and enhancements to supporting DLLs.



Customer-Supplied Software

Required:

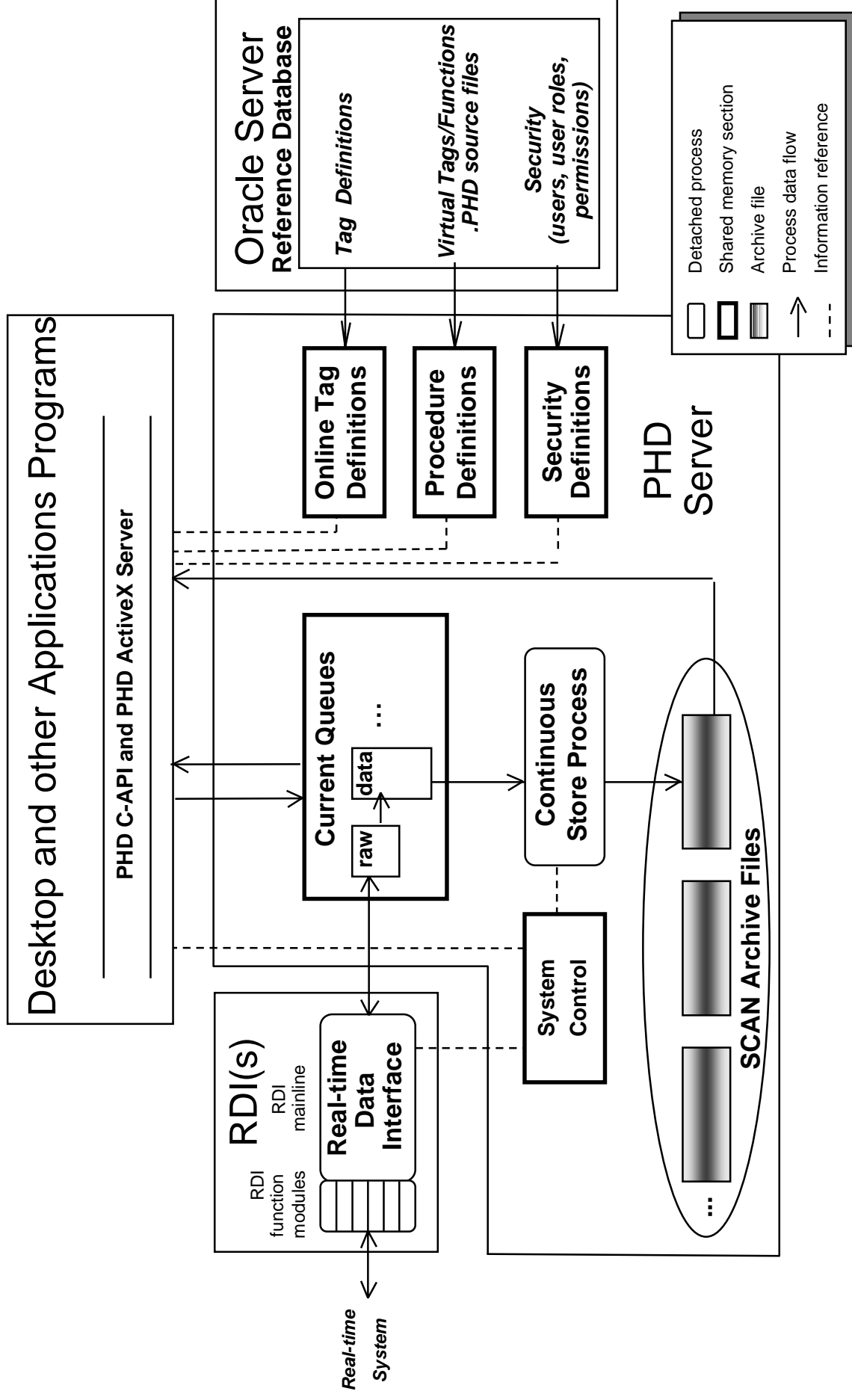
For NT Operating System - Oracle 7.3.4 or later but <8

Optional:

MSOffice 97 (Access, Excel, Word, PowerPoint, VBA)
Visual Basic 5.0 or 6.0

Refer to the *Uniformance Database Specification and Technical Data* for complete information about software requirements and options.

System Data Flow



Honeywell

Helping You Manage Your World

www.iac.honeywell.com

