

# Metrotek DC2000 Software

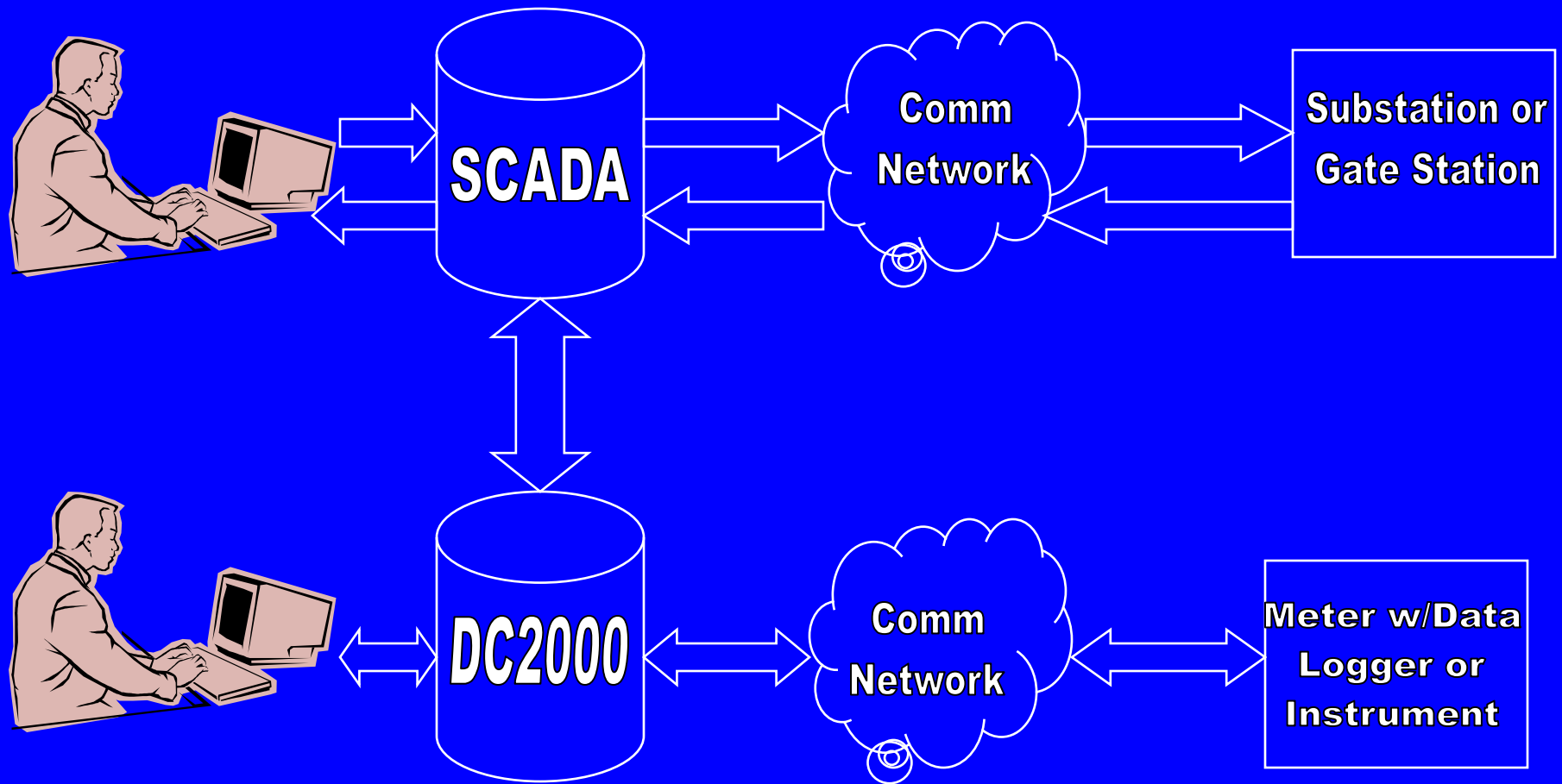
## Advanced Data Collection and Management



- *Fast, Scalable Advanced Metering Infrastructure (AMI), Automatic Meter Reading & Telemetry Collection*
- *Open Database for Easy Integration with Enterprise Systems*
- *Supports Wired & Wireless connections to meter assets*
- *Secure, Internet/Intranet Third Party Access*

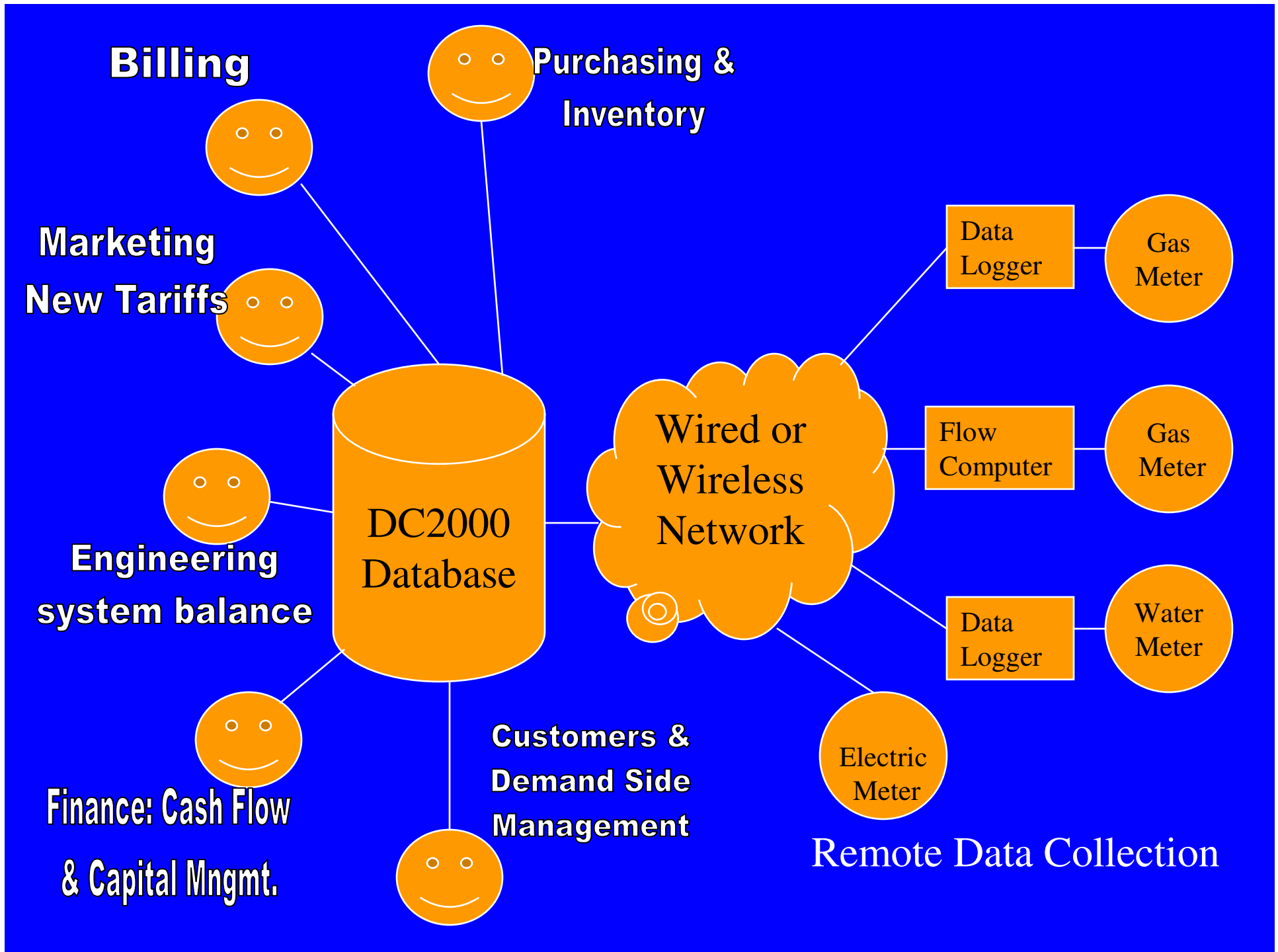
How is DC2000 Different from SCADA and other legacy control and Data Acquisition Systems ?

**SCADA is a “closed loop”, real time, physical asset control system.**

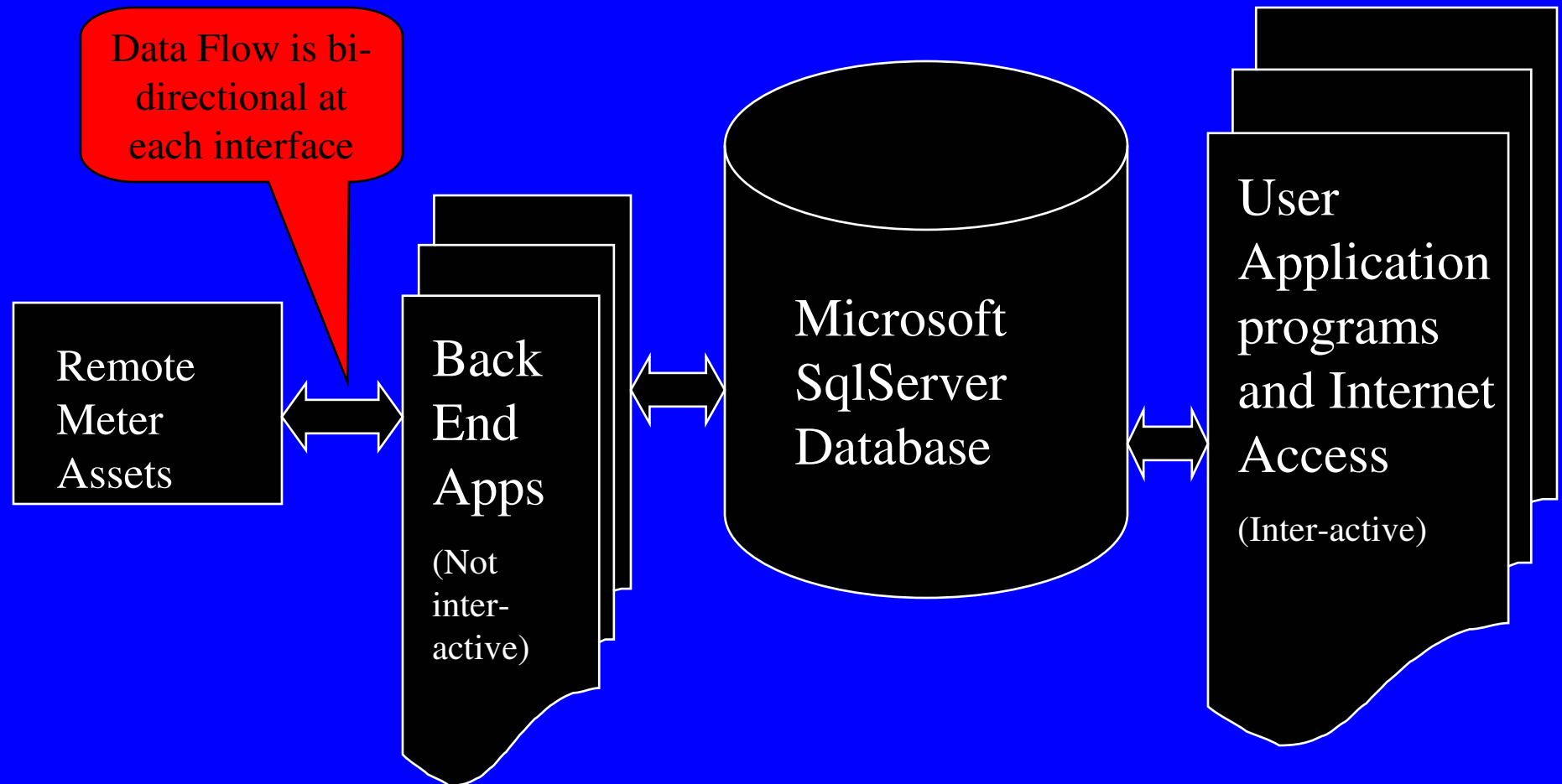


**DC2000 is a Financial Tool in the Cash Flow Stream**

DC2000 gets meter data IN to its  
database...and it gets meaningful  
information OUT to the people  
who need it most !



# DC2000 Architecture



# DC2000 Data Management Hierarchy supports aggregation and sub-metering

for example:



**National**

**Regional**

**Local**

# DC2000 is Fault Tolerant

System Applications are controlled gracefully

The screenshot displays a Windows desktop environment with several open windows:

- R:\MDASDP.EXE**: A command prompt window showing log output for MDAS DP initialization and router connection. The text includes: "Valid License Required", "03/12/2002 11:19:32 - Performing MDAS DP Initialization... 003.030", "03/12/2002 11:19:32 - Establishing Router Connection => JOEH1", "03/12/2002 11:19:33 - Re-Releasing any Lost Alarm", "03/12/2002 11:19:33 - [x5AC,1452]MDAS DP MainThread", and "03/12/2002 11:19:33 - CallProc started...".
- MDAS DC <MAIN> Initializing on**: A green command prompt window showing initialization details: "1 Rows Retrieved from Product M", "DC Cfg Table !DST Date 2001 10/", "DC Cfg Table !Hi Vol Start 10:0", "Monitor mode is:\*\*\*\*\*", "Init\_DC\_Channels beginning...", "Spawning Controller Thread", "Spawning RawRelease Thread", "Spawning HURelease Thread", and "Spawning HourlyStatistician Thr".
- R:\ALMHAND.EXE**: A red command prompt window showing: "03/12/2002 11:19:44 - Alarm Handler version:003.01".
- EXECUTIVE - DC2000**: The main application window, featuring the METRETEK logo and a computer icon. It includes fields for "Computer: JOEH1", "Connection: Database connected for 0 : 1 min.", and "Executive Master". A log window shows the following entries:
  - 03/12/2002 11:20:16 AUTOLOAD starting...
  - 03/12/2002 11:20:06 ALARM\_HANDLER starting...
  - 03/12/2002 11:19:56 DATA\_COLLECTION starting...
  - 03/12/2002 11:19:46 ROUTER\_ starting...
  - 03/12/2002 11:19:36 DATA\_PROCESSING starting...
  - 03/12/2002 11:19:27 Start all System-Processes by EXECUTIVE
  - 03/12/2002 11:19:27 EXECUTIVE starting...A table below the log shows the status of these processes:

Process	Restarts	State	Date Started
ALARM_HANDLER	1/1	Running	03/06/2002 14:41:!
AUTOLOAD	1/1	Running	03/06/2002 14:41:!
DATA_COLLECTION	1/1	Running	03/06/2002 15:08:!
DATA_PROCESSING	1/1	Running	03/06/2002 14:41:!
ROUTER_	1/1	Running	03/06/2002 14:41:!

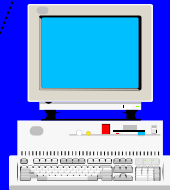
Control buttons include "Lock", "Unlock", "Option SetUp", "Start All Processes", "Stop All Processes", and "Help".

# THE METRETEK DC2000 SYSTEM

## TYPICAL DC 2000 PC NETWORK

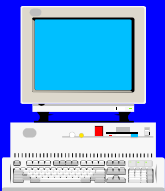
### Hardware:

**Pentium PC**  
**256 meg RAM**  
**10 Gig Hard Disk**  
**CD ROM**  
**Monitor**  
**LAN Interface Card (NIC)**  
**Windows 2000/XP**  
**Digiboard (Com Port Multiplexer)**  
**UPS**

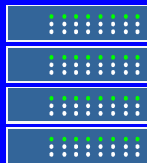


Data Collector/Processor

Metrotek Modems (for PSTN loggers)



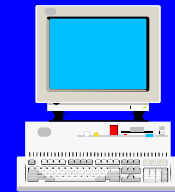
Data Collector/Processor



Database Server

### Hardware:

**Pentium PC**  
**512 meg RAM**  
**40Gig RAID Hard Disk**  
**CD ROM**  
**Monitor**  
**NIC**  
**Windows 2003/XP Server**  
**Microsoft SQLServer**  
**UPS**  
**Backup device or system**



User Workstation 1

### Hardware:

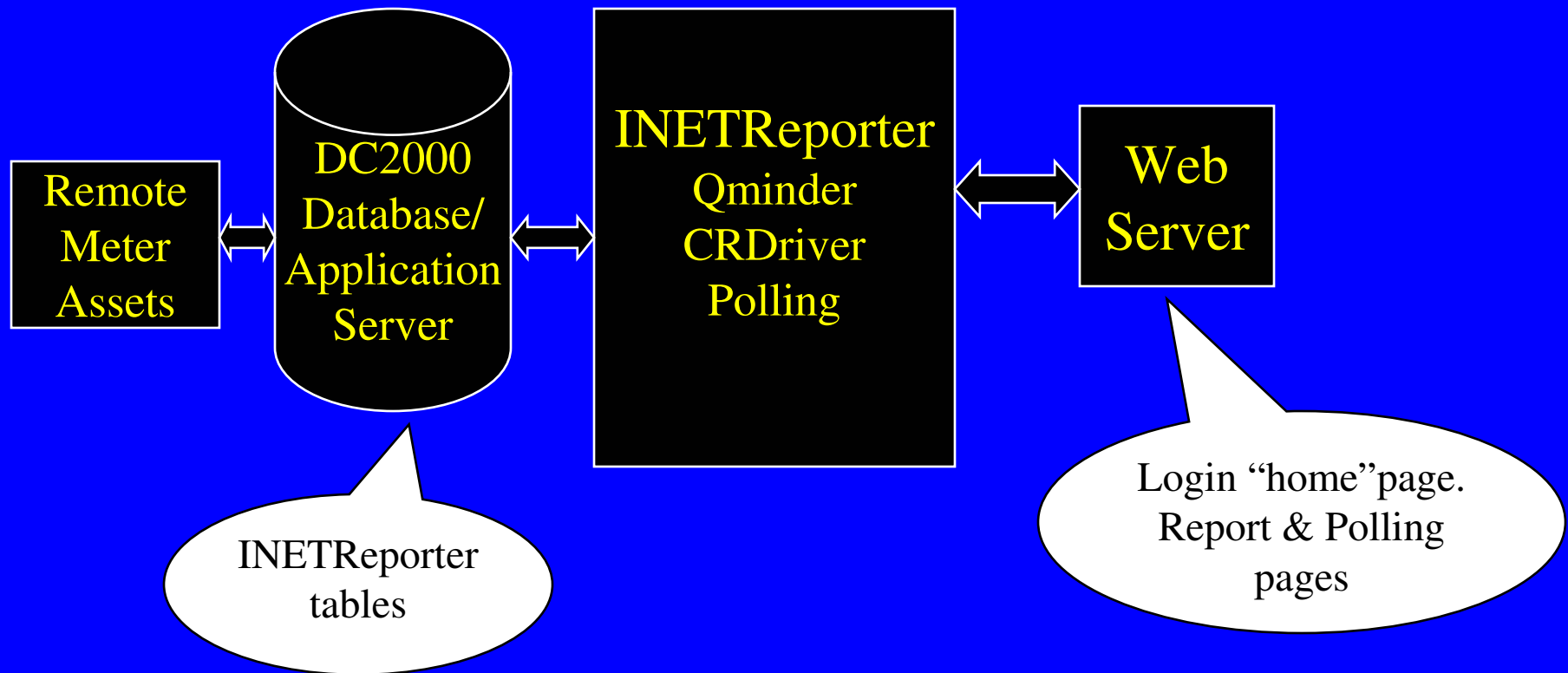
**Pentium PC**  
**128meg RAM**  
**10 Gig Hard Disk**  
**CD ROM**  
**Monitor**  
**NIC**  
**Windows 2000/XP**



User Workstation n

# INETReporter

*an optional DC2000 application for internal or external customer data access via the Internet*



# DC2000 Remote

Optional Browser based application runs on Windows laptops and PDAs

Provides remote TCPIP access for field installation & maintenance teams

**DC2000 Remote**

Add New Remote Add Copy Find Remote Change Password Log out Help

Remote Information for '02ABBA'

Edit Inputs

REMOTE NAME	Default Name	SUPPLY POINT ID	0
SITE ID	Default Site ID	LOGGER OWNER	SGN
ADDRESS 1	Default Address 1	CONTACT NAME	A01
ADDRESS 2	Default Address 1	CONTACT PHONE	Default phone number
CITY	Default City	LOGGER TYPE	NDM
COUNTY	Default County	BATTERY CHANGED	2007-11-01 00:00:00
LDZ	SO	LAST CALL	2007-11-01 10:39:11
CONNECTED DEVICE 1		CONNECTED DEVICE 2	
CONNECTED DEVICE 3		CONNECTED DEVICE 4	
LOCATION DESCRIPTION			

Update Remote Information

**Maintenance History**

Add New Maintenance Record

EDIT	REFERENCE NUM	COMPLETED	DATE INITIATED	PRIORITY	DESCRIPTION	TECHNICIAN
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**Alarm History**

2007-12-31 23:49:14 Clock Resync Alarm  
2007-12-31 23:48:27 Unit Reset Alarm  
2007-12-31 23:42:22 Unit Reset Alarm  
2007-11-01 10:39:11 Clock Resync Alarm

# Why use DC2000?

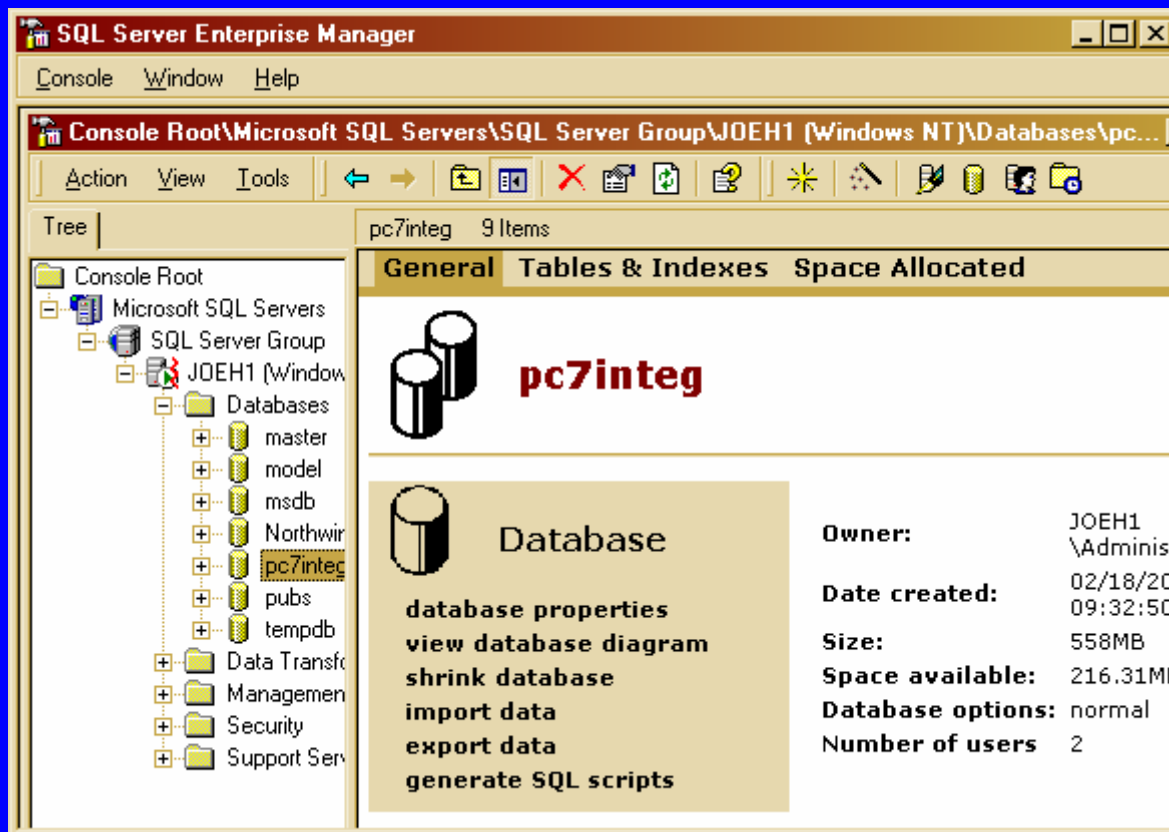
- Compatibility
  - Seamless, Total integration with all Metretek devices and many third party standards based devices.
  - Complete end to end system means only one phone call to make for service.



# Why use DC2000?

- Microsoft SQL Server Database

- Open architecture, not proprietary
  - ODBC and SQL compliant
- All data is accessible by end user
- Tens of thousands in use worldwide





# Why use DC2000?

- Metrotek Service and Support
  - Long term, continuous technology development
  - Approximately 100 systems worldwide
    - National Grid (UK & US), Scottish & Southern Energy, Metro Gas(BA), PG&E, PSNC, Tampa Electric, San Diego G & E, Peoples Gas Chicago, Atlanta Gas Light, Agility (Australia), PSE&G, Enbridge Energy(Toronto), GasMetro (Montreal)
  - Providing customer satisfaction and solutions since 1977.

# DC2000... Your Competitive Edge

- Scalable. Economical for small or large systems
- Supports all Metrotek Remote Hardware including GPRS/EDGE and CDMA-1X and EVDO loggers and instruments
- Complete support for ANSI C12.19 compatible device.
- Easy to integrate. Standards-based, open database.
- Remote Control & Notification functions are available.
- Complete on-line Help System
- Fastest data thru-put in the industry
- Web enabled for access by internal and external customers
- Comprehensive alarm detection & notification