



Introduction to ArcSDE 8

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Why are you here?

- Introduction to ArcSDE?
- What is a GeoDatabase?
- Existing SDE user?
- Existing ArcInfo user?
- Technical details on implementation?
- Just confused...

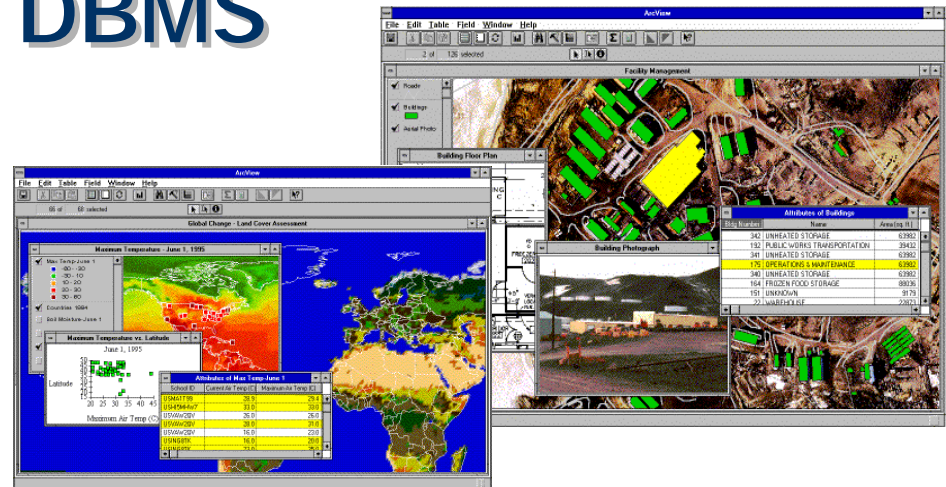
ArcSDE 8

- Do you want ArcSDE 8 (and why)?
 - Answer:
 - to store all your geographic and attribute data in a DBMS
 - provide open data access to all your geographic data sources



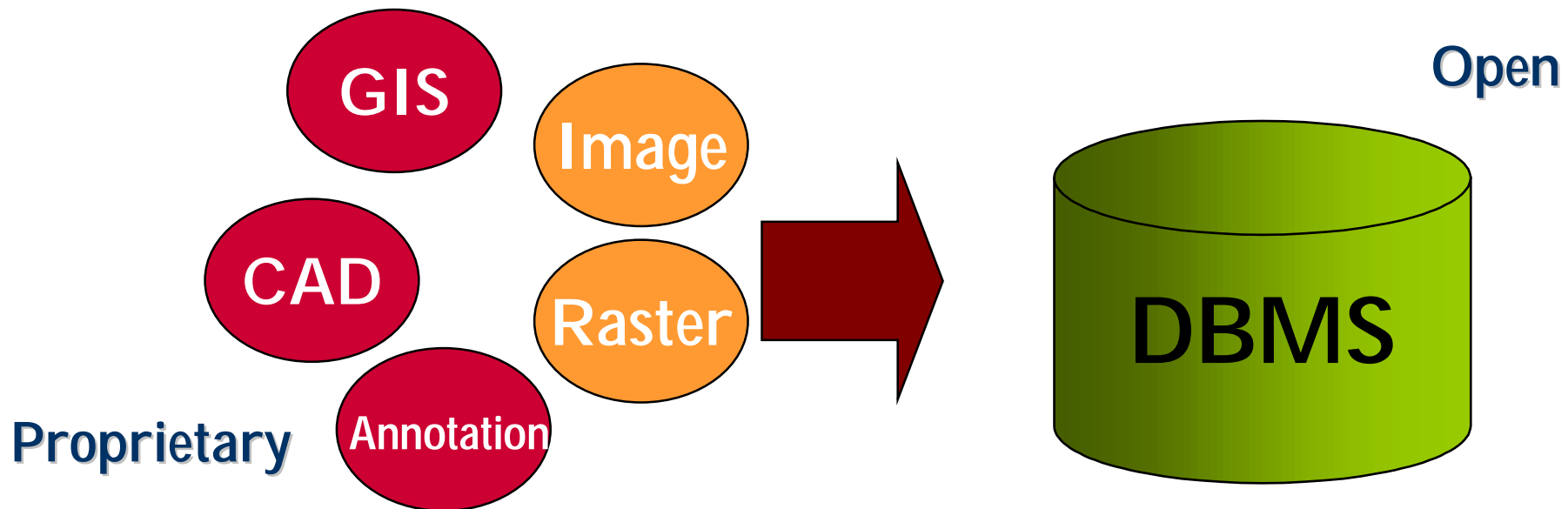
What is ArcSDE?

- A new way to store, manage and access spatial data
- A server application that's works in cooperation with a DBMS

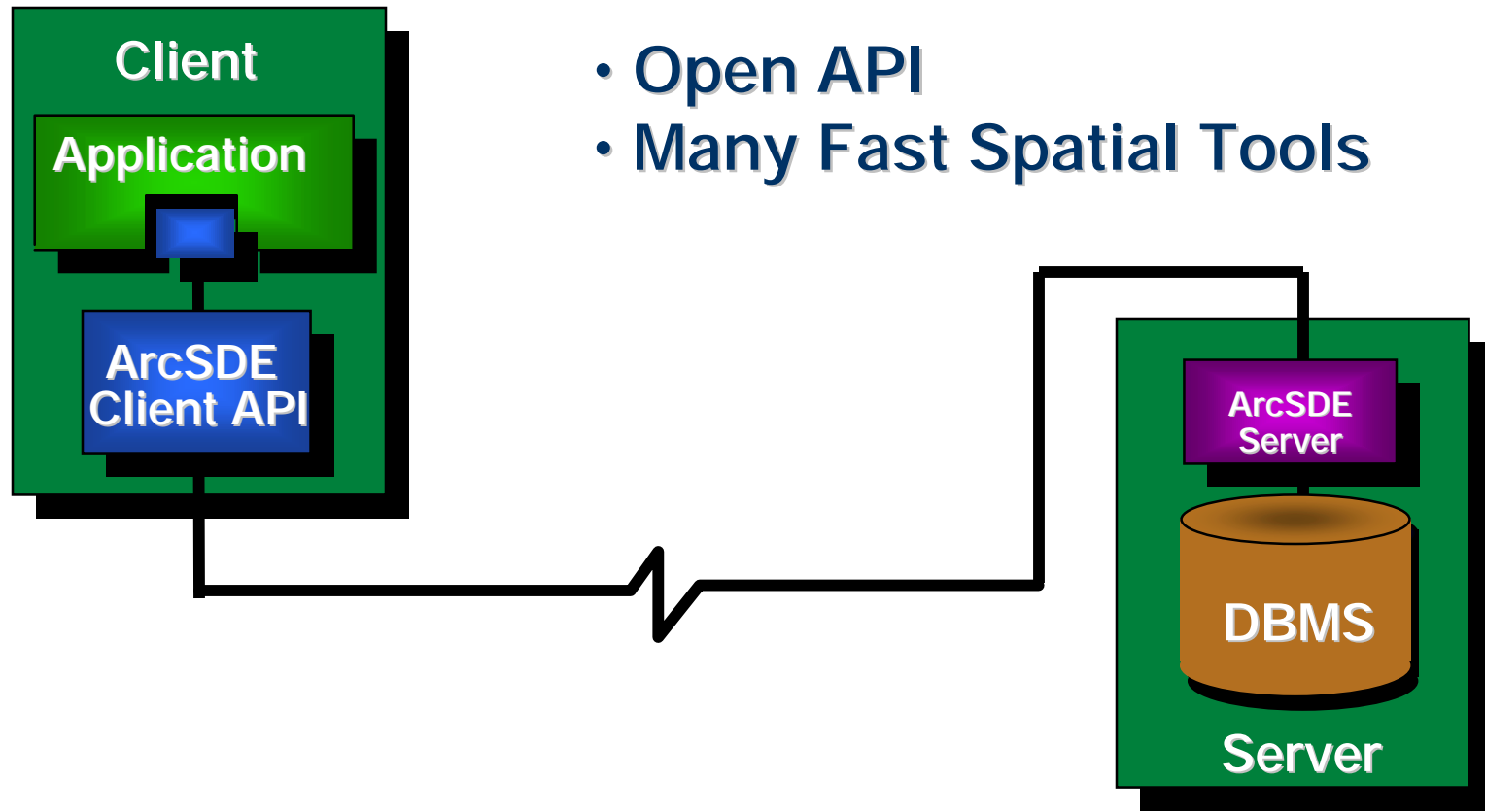


Data Management

- All Data Stored in the DBMS
- DBMS Management of Spatial Data
 - Replication, Backup, Distribution, etc.



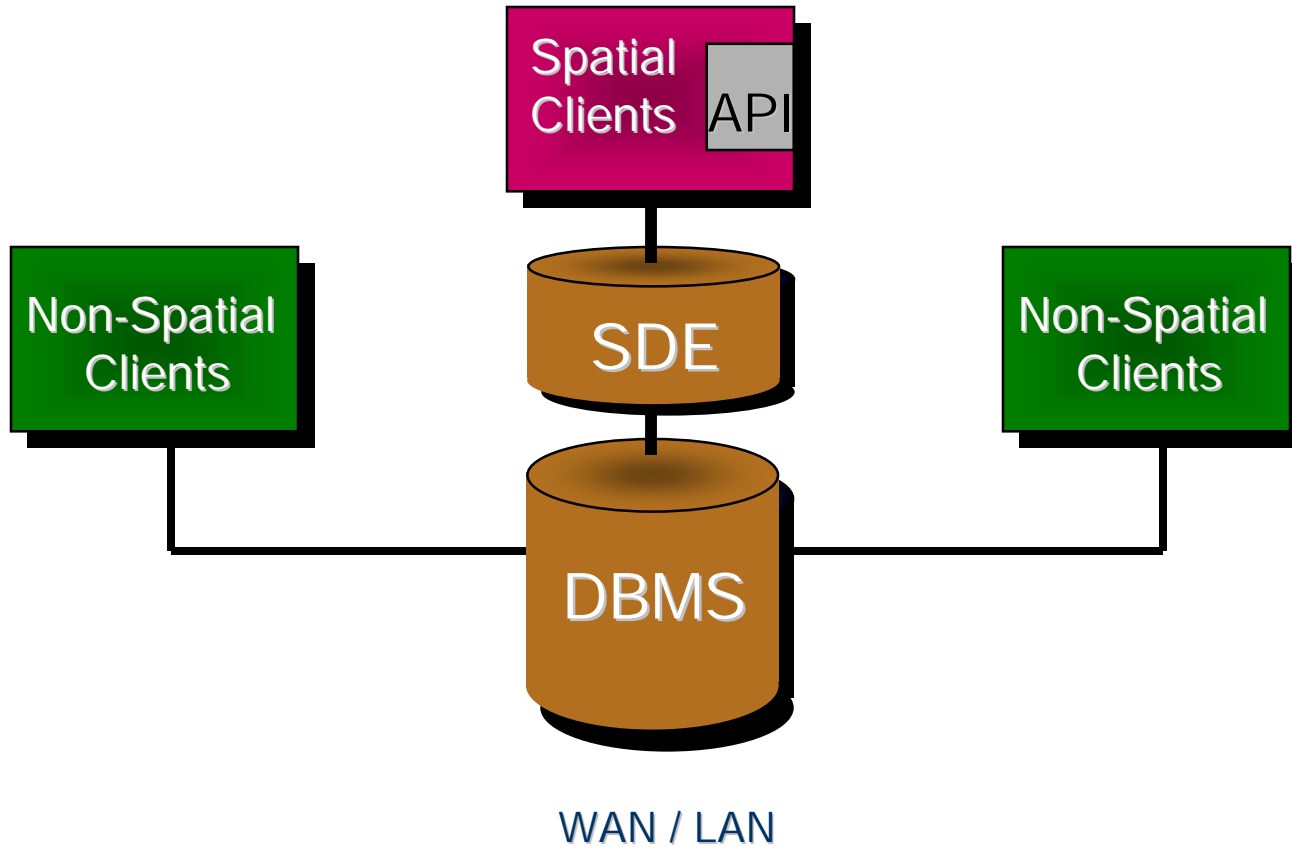
ArcSDE Architecture



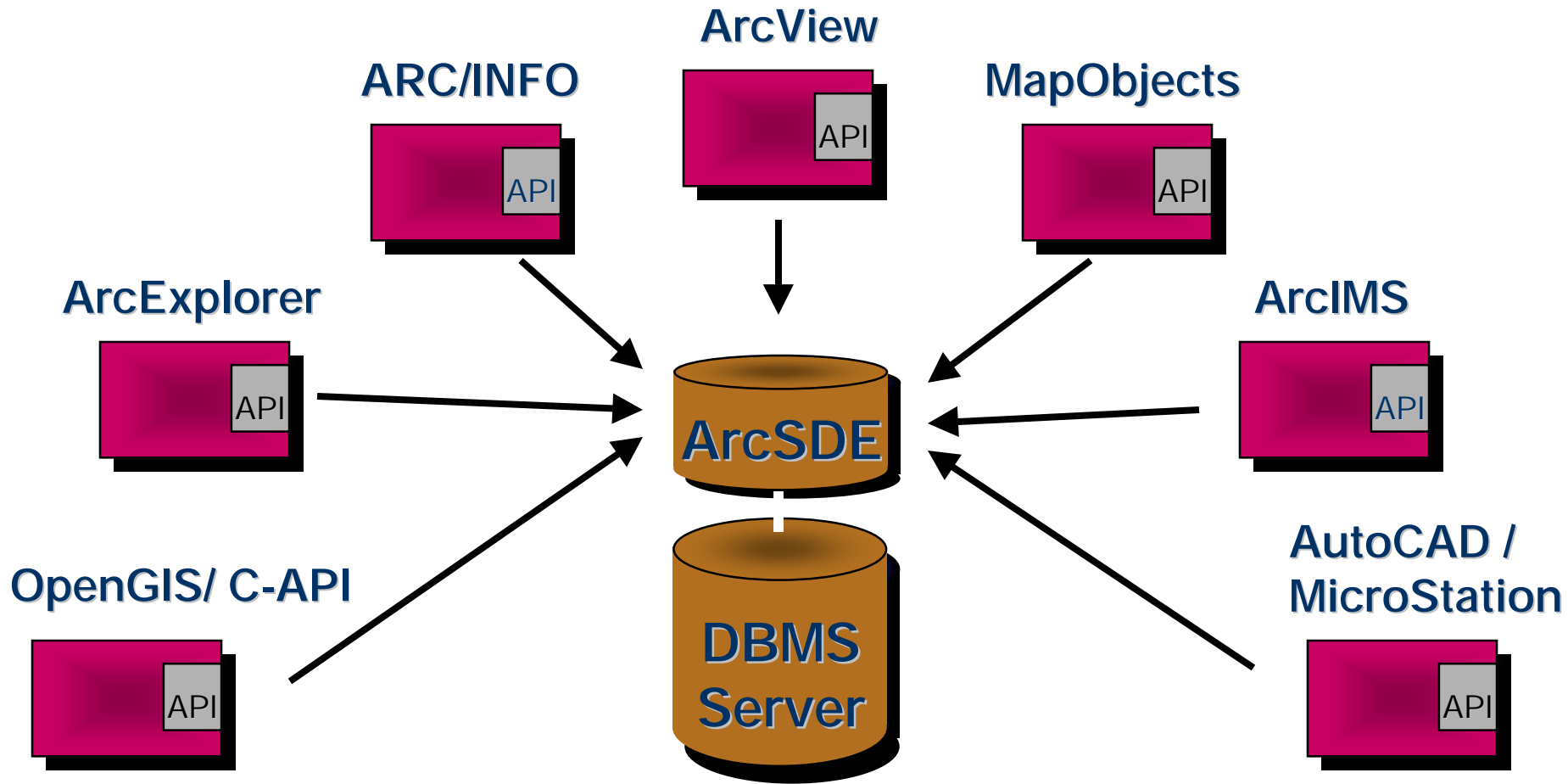
Benefits of ArcSDE 8

- **Spatial data inside DBMS**
- **Very large databases (scaleable)**
- **Continuous (seamless) data**
- **Multiple user environment**
- **Client / Server technology**
- **Open API**

ArcSDE Server Connectivity



ArcSDE Client Connectivity



ESRI's Strategy for ArcSDE

- Hardware and DBMS independence
- Open published API's and data format
- Active promotion of standards (OGC / ISO SQL3)

Tough Question #1

SDE 3.0?

ArcSDE 8?

SDE for Coverages?

What is/was SDE vs. ArcSDE?

- 1998

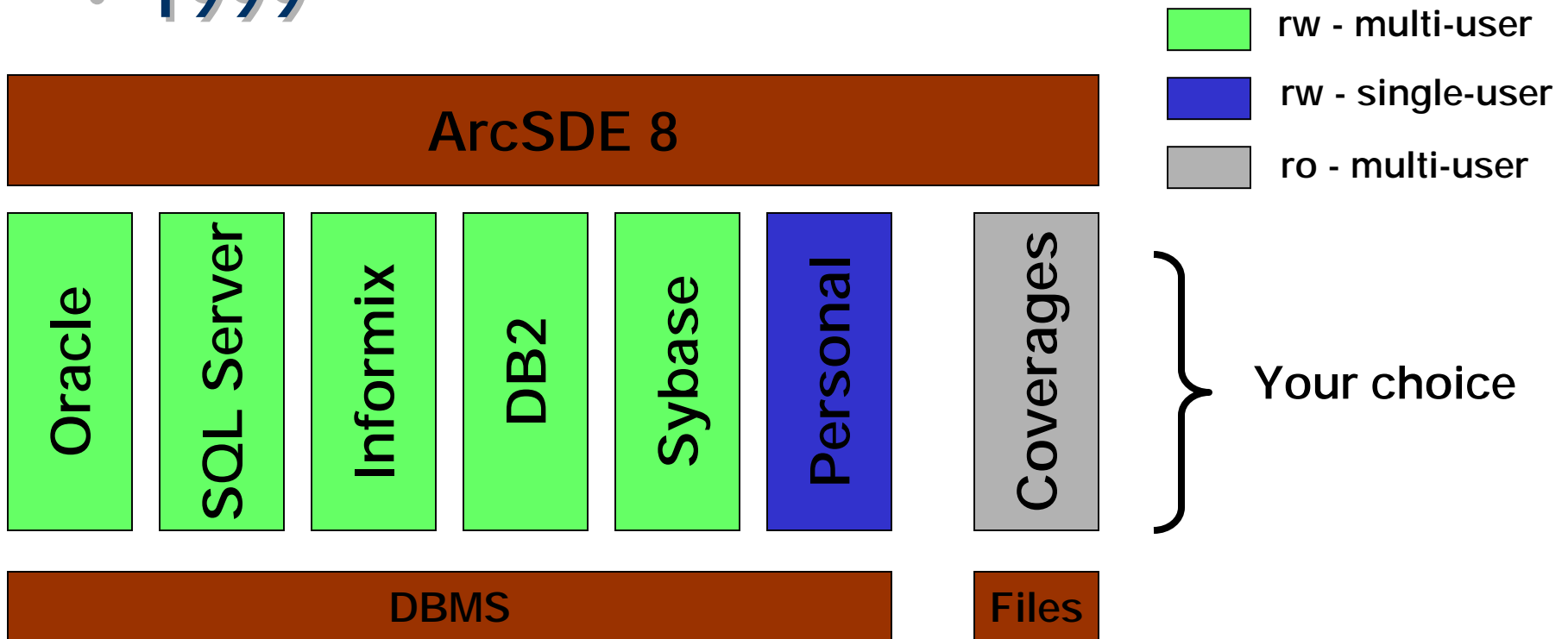
- SDE 3.0: Spatial Database Engine for RDBMS
- SDE for Coverages
- ArcSDE = SDE 3.0 + SDE for Coverages

Marketing Box =



ArcSDE 8 Drivers

- 1999

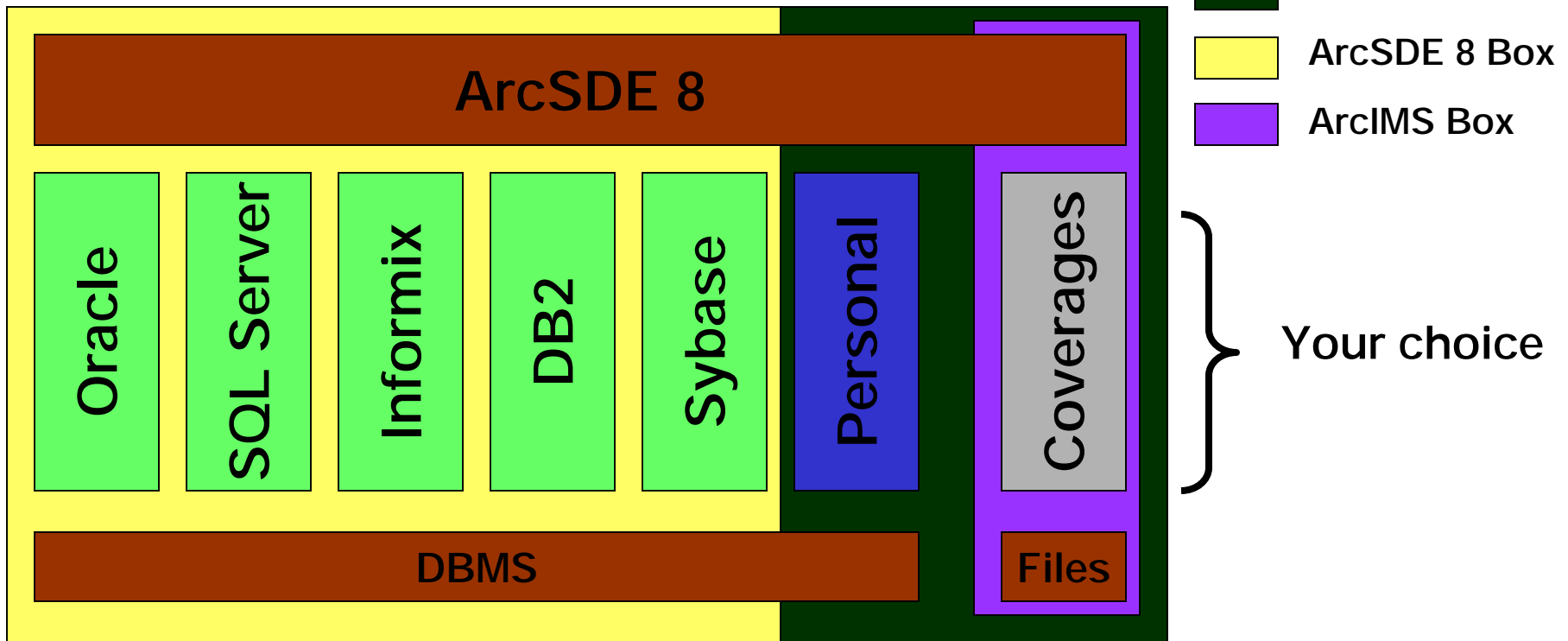


Choose Your DBMS

- **SDE 3.0**
 - Oracle 7.x, 8.x, 8i
 - SQL Server 6.5, 7.0
 - Informix Dynamic Server
 - DB2 Universal Database
 - Sybase
 - Coverages
- **ArcSDE 8**
 - Oracle 8.x, 8i
 - SQL Server 7.0
 - Informix Dynamic Server
 - DB2 Universal Database
 - Sybase
 - Coverages
 - Personal ArcSDE

Product Boxes

- 1999



Product Packaging / Marketing

- **ArcInfo 8 Box**
 - ArcSDE Personal
 - single user
 - ArcSDE for Coverages
 - multi-user
 - free server / free connections
 - ArcSDE for an DBMS
 - multi-user
 - optional license (server/connections)

Product Packaging / Marketing

- **ArcSDE for an DBMS Box**
 - multi-user server / connections
 - **ArcInfo 8 Box (12 months)**
 - ArcSDE for Coverages
 - multi-user
 - free server / free connections
 - ArcSDE Personal
 - single user

Software Licensing/Prices

- **ArcSDE Servers:** *5 connections included*
 - ArcSDE - Standalone: _____
 - ArcSDE as an Extension to ArcInfo: _____
- **Additional Connections**
 - Read Only Connections: *1/2 price of r/w*
 - Read-Write Connections: _____
 - ****ArcInfo 8 licenses include a full-use connection to ArcSDE!**

Tough Question #2

Simple features?

Custom features?

Object thingies?

Geodatabase?

ArcSDE?

Data (Things) in ArcSDE

- **SDE 3.0**
 - tables
 - tables with geometry which are layers
 - features
 - [simple features]
- **ArcSDE 8.0**
 - tables
 - tables with geometry which are layers
 - features
 - [simple features]



More Data (Things) in ArcSDE

- If you have ArcInfo
 - ArcCatalog
 - ArcMap
 - ArcToolBox
 - Versions
 - Rasters
 - Locators (geocoding)
 - Relationships
 - Behaviors
 - “Object Thingies”
 - [custom features]
- Must have COM to create and access these “things”*

ArcSDE 8 and the Geodatabase

- What is a Geodatabase?
- Definition #1: generalized
 - Any instance of geographic data in an DBMS
 - Therefore, ArcSDE is the server technology that is used to create and manage a Geodatabase.

ArcSDE 8 and the Geodatabase

- What is a Geodatabase?
- Definition #2: programmers
 - The data that is stored in ArcSDE with an DBMS and that can contain advanced behaviors, relationships, etc.
 - Data in ArcSDE that has object ids.
 - Data that contains an object relational data model.

ArcSDE 8 and the Geodatabase

Model	Geo - Relational	Object - Relational
Storage Container	Workspace / Coverages	Geodatabase
Data Engine	File System	ArcSDE / RDBMS

Tough Question #3

Simple features vs. Custom features?

SDE 3.0

- **[Simple Features]**
 - read/write from ArcInfo 7.x, ArcView 3.x, MapObjects, etc.
 - read/only for ArcInfo 8
 - for r/w upgrade to ArcSde 8.

ArcSDE 8

- [Simple Features]
 - read/write from Arcinfo 7.x, ArcView 3.2, CAD Client, MapObjects, etc.
 - read/only from ArcMap
- [Custom Features]
 - read/write from ArcInfo 8, COM technologies
 - read/only for non ArcInfo 8, COM technologies (ArcView,...)
 - read/only of simple feature representation
 - “client not smart enough”

Tough Question #4

**Personal ArcSDE or Personal
Geodatabase?**

Personal ArcSDE

- Built on top of Microsoft Jet
- Single-user ArcSDE included with ArcInfo 8.
- Supports [simple features] and [custom features - geodatabase]
- Name: Personal ArcSDE / Geodatabase?

Tough Question #5

How should I get started with
ArcSDE?

Take ArcSDE 8 for a test drive

- Existing GIS User (ArcInfo, ArcView...)
- Try ArcSDE for Coverages
 - part of ArcInfo (free)
 - explore the client / server API and how the clients work with the ArcSDE server technology.
- Try ArcSDE for an DBMS
 - bigger, more functionality, DBMS required

Take ArcSDE 8 for a test drive

- Try the new ArcInfo clients
 - ArcMap, ArcCatalog, ArcToolBox
 - Try these with ArcSDE simple features
- Try a Geodatabase
 - Make your simple features more intelligent using ArcInfo 8.
 - Personal ArcSDE (personal geodatabase)
 - “Enterprise” ArcSDE

Any more Tough Questions?

Or is everything crystal clear?

Geographic Knowledge Everywhere

Uc
99c

ESRI *Nineteenth Annual User Conference*