The CoreWall Suite

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The Four Components of the CoreWall Suite

Corelyzer

Visual Core Description

Workflow Database

A Data and Collaboration Database

CoreCLIP

Composite sections which can be mapped to a true depth scale using Cross Correlation between holes.

Functionality taken from Sagan/Splicer used on IODP cruises

Core Navigator

Core data discovery / Spatial display

Corelyzer

The primary user interface for visual core description

Cross platform

- Windows, OSX, Linux

Displays:

- Core images
- Multi-sensor core-logger data
- Smear slides and other images from microscopes
- Interpretation and comments from all users
- Links to related data, papers, websites

Can display more data/images than can be held in main memory

Can be extended by users with plug-ins

Corelyser Plug-Ins

Developer added functionality

Access to other databases

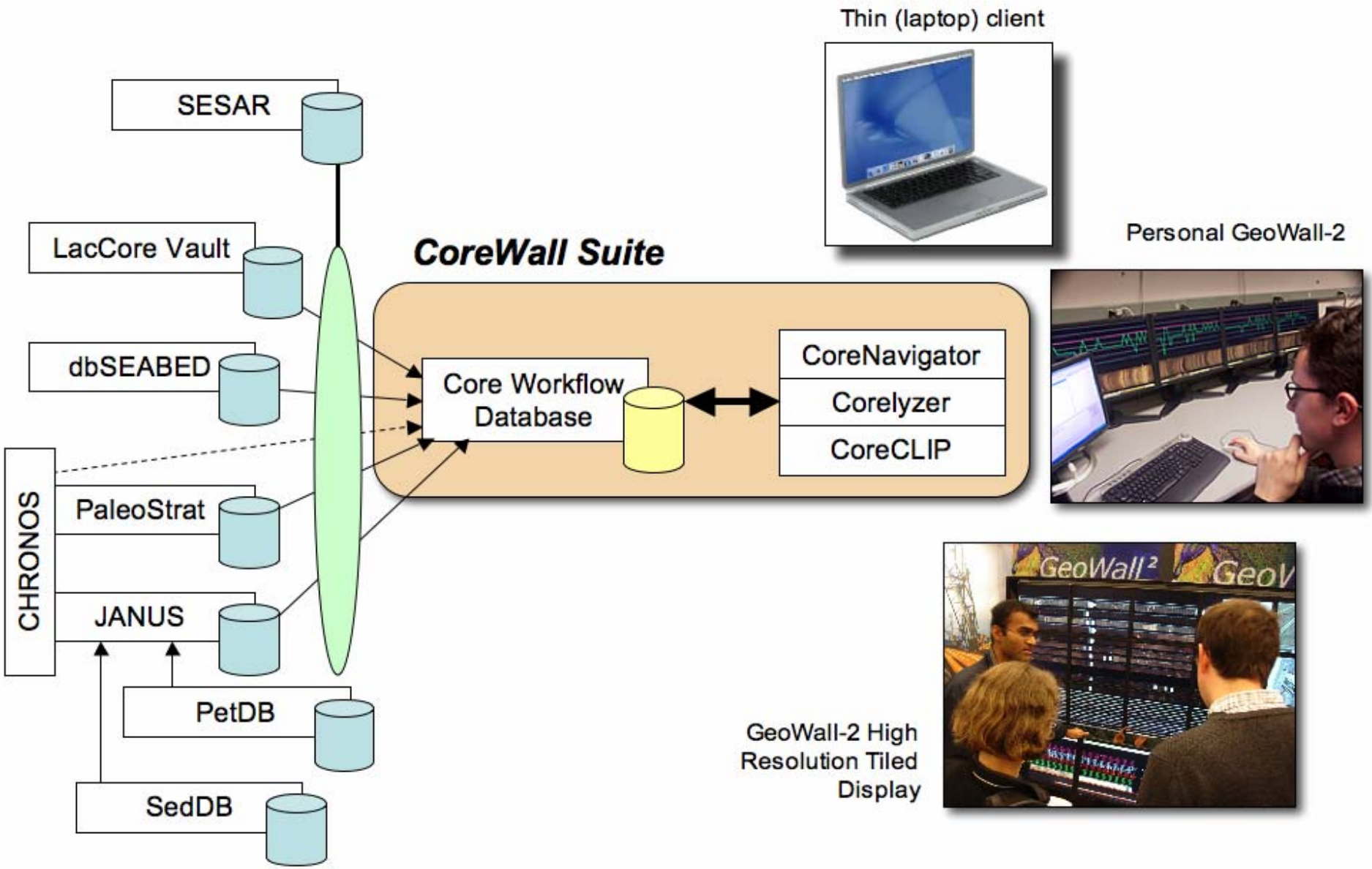
New analysis/data discovery tools

Attachment point is Java but plug-ins can be written in any language

Workflow Database

- Captures all user work performed in Corelyzer
- Can be synchronized in real-time
  - Between multiple user sites that are connected by Internet
- Can be synchronized remotely (offline)
  - i.e. USB drive moved between two locations that don't have Internet connectivity
- Can hold data locally from multiple databases
  - Local data, Janus, SedDB, World Data Center for Paleoclimatology, etc.
- All data & comments have user and timestamps with the ability to restrict data access

Database Communication



CoreCLIP *Core Log Interpretation Platform*

Based on:

SPLICER

Enables viewing of multiple data sets to create a composite section via visual correlation to create tie-points between similar features

SAGAN

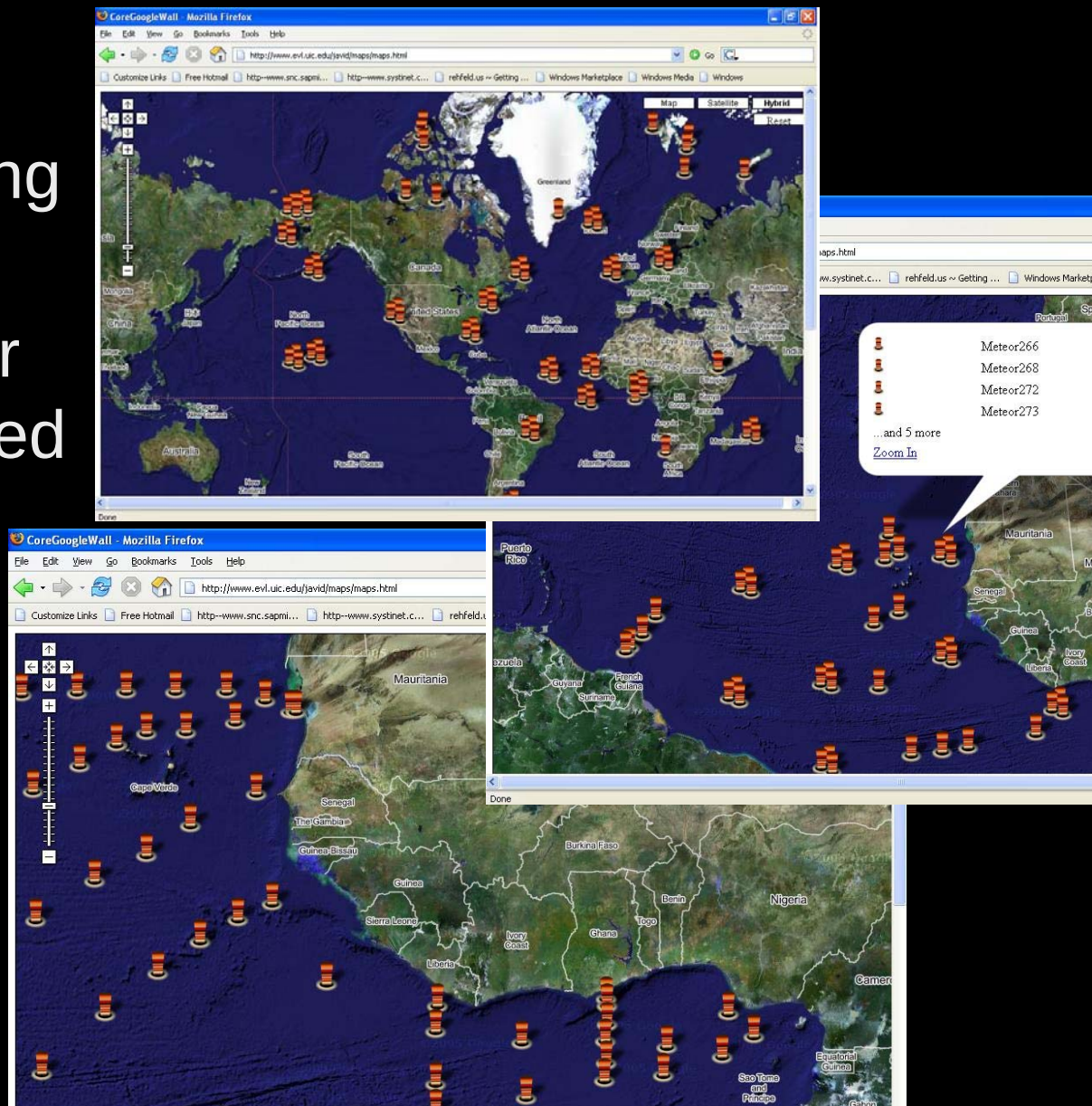
The composite core section can be depth-mapped to downhole geophysical logs that record *in situ* data of many of the same properties measured on cores

CoreNavigator:
Data discovery and geographic context

- 3D browser of core data
- Enables core logs and data to be accessed from core visualizations in geographic context

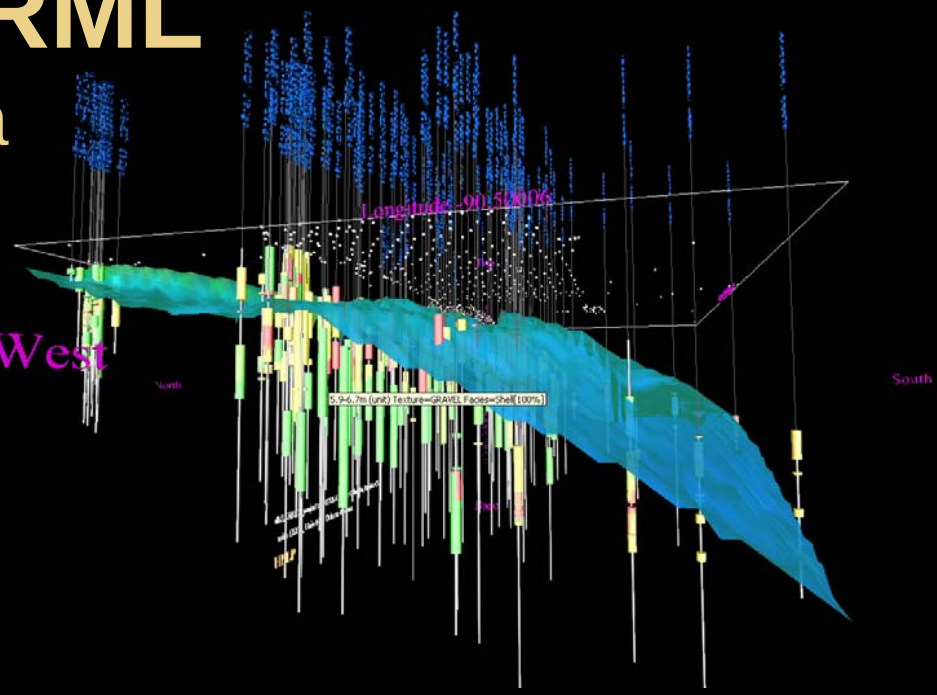
Core Navigator Coregle

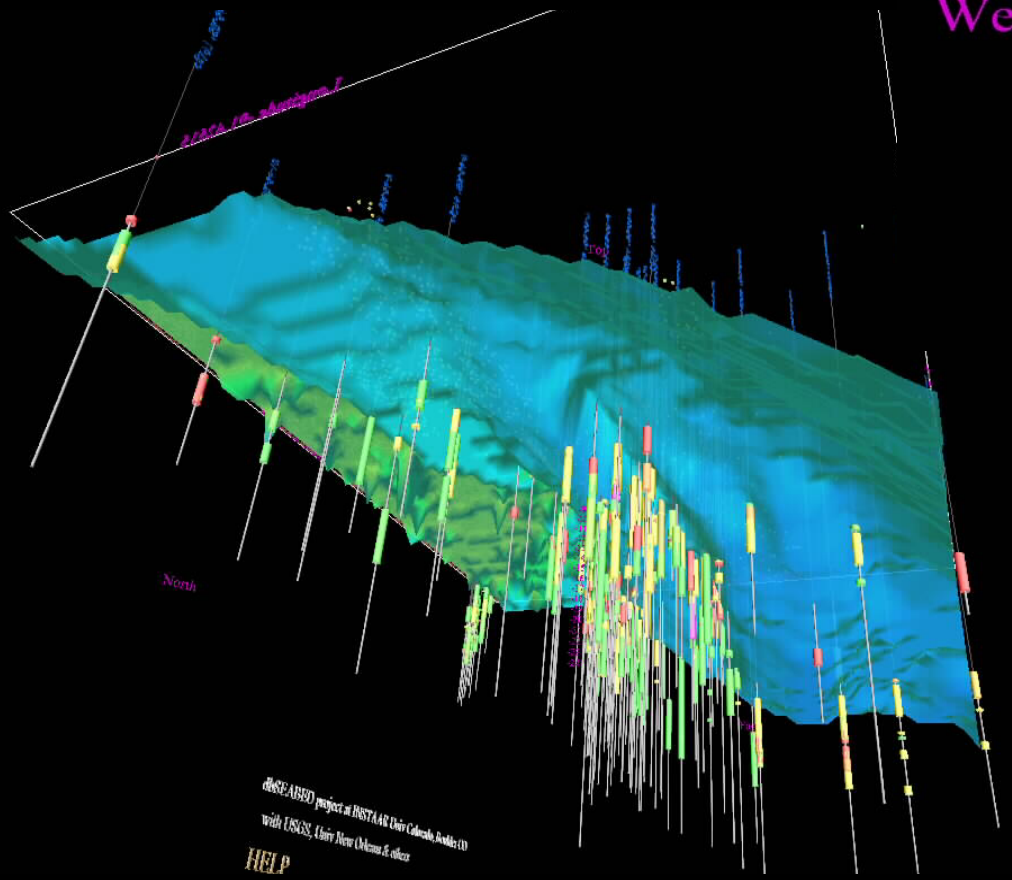
- Core Discovery using Google Maps
- Launches Corelyser or goes to a related website



Core Navigator VRML

Ship Shoal Area, Louisiana





- Cores in spatial context
- Stratigraphy and lithology displayed on the cylinders
- Users can click on a core to retrieve data and display in Corelyser

CoreWall Suite Hardware Options

Small

- Mac/Windows/LINUX Laptop with a graphics chip made for gaming
- $2-3K for 1-2 Million pixels

Medium

- One PC/Mac and 1-2 30” displays
- $6-10K for 4-8 million pixels

Large

- One PC/Mac and 4 – 20” or 2 – 30” displays
- $10K~$15K for 16 million pixels

CoreWall Suite Large Display Option

- 4 – 20” or 2 – 30” LCD displays
- Single “Game” PC/Mac
- 10 – 20 Million pixels
- Configurable between 4x1 and 2x2 tiles
- $5,000-$15,000

Specific to ANDRILL

- Corelyzer will read XML files from PSICAT
  - Patterns will be preserved
- Import of multi-track scanner data into Corelyzer/Workflow database
  - Under subcontract with Bill Kamp, IAG Partners, Inc.
- Bidirectional off-ice synchronization with a USB drive carried to New Zealand
  - Visual core description performed in McMurdow can be seen, and added to by PIs off-ice and visa versa