

# Data Warehouse and Geographic Information System

Current Status  
And  
Recommendations

# DWGIS Current Status

- **Paducah**

- 2,425,877 env records
- 140 GIS layers
- Phase I completed
- Advanced query tools
- Feb 2006 – OREIS
- Not installed on-site

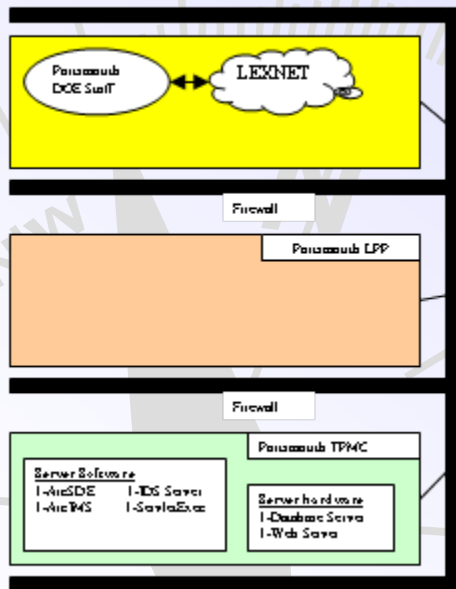
- **Portsmouth**

- 1,082,534 env records
- 80 GIS layers
- Phase I completed
- No Adv. query tools
- Dec 2003 – OREIS
- Installed on-site

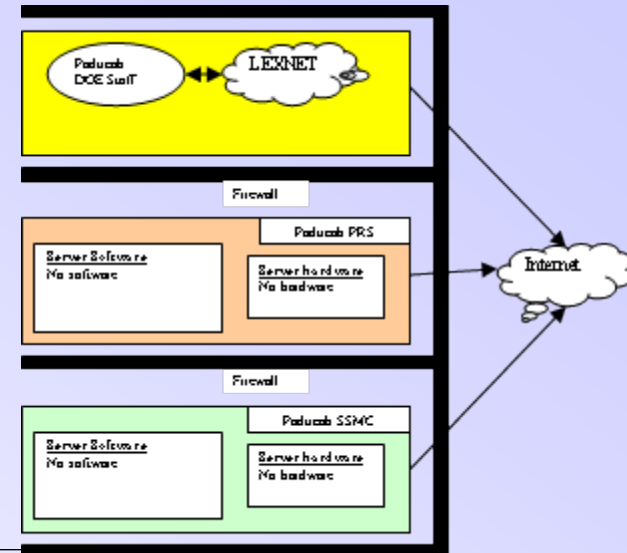
# Issues

- **OREIS no longer accessible - moved**
- **OREIS and DWGIS behind firewalls**
- **Portsmouth DWGIS needs OREIS refresh**
- **Paducah requires local DWGIS installation**
- **PPPO requires PORTS/PAD DWGIS access**
- **KY stakeholders require PAD-DWGIS access**

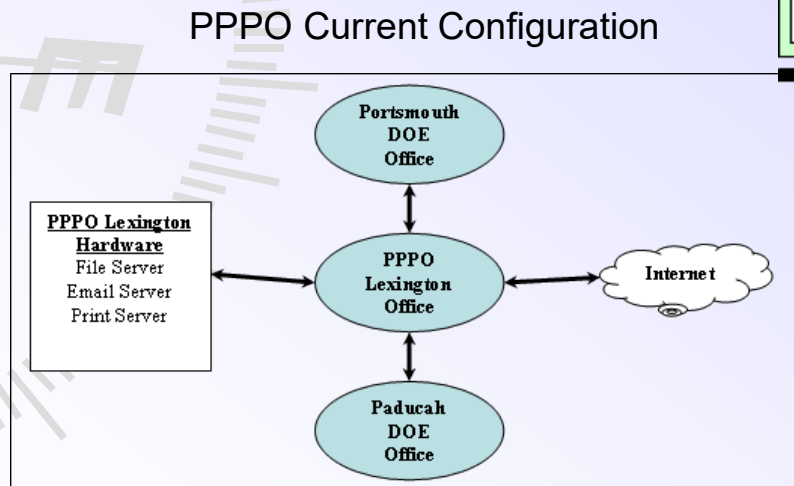
# Current Network Configurations



Portsmouth Current Configuration



Paducah Current Configuration



PPPO Current Configuration

# DWGIS Recommendations

- **PORTS**

- Update DWGIS with latest OREIS data
- Train LPP-TPMC
- Update DWGIS with latest query tools

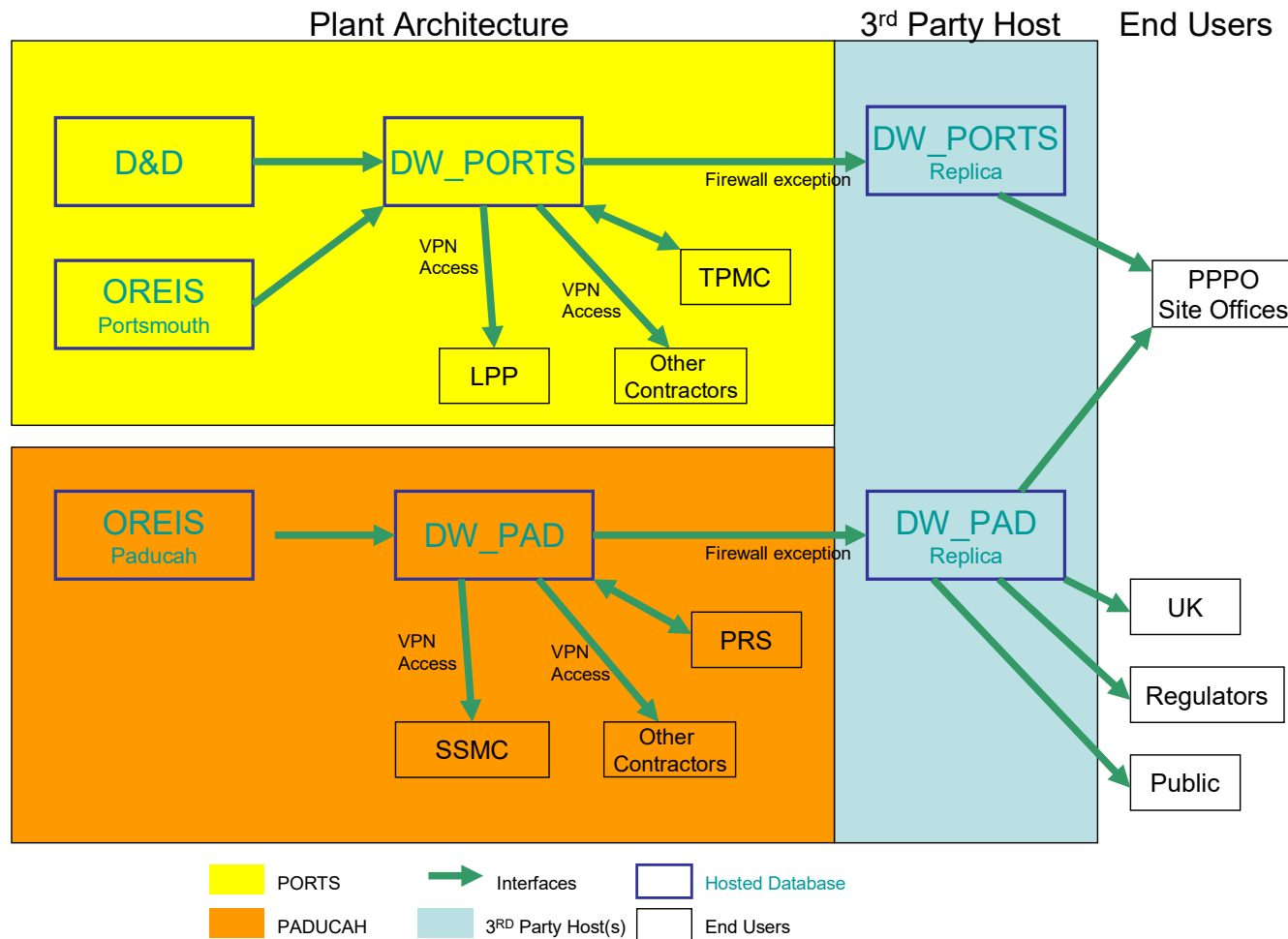
- **PADUCAH**

- Procure HW/SW to install on site
- Install and Train PRS and SSMC

- **OVERALL**

- 3<sup>rd</sup> Party Hosting for PPPO and KY Stakeholders
- Phase II Development

# Recommended Network Configuration



# Phase II

- **Document Indexing and Linkage Module**
- **Risk Assessment Module**
- **GIS Analyst Feature Extraction Module**
- **3D Visualization Software White Paper**

# Document Indexing and Linkage Module

- **Retrieve indexed environmental reports**
- **Retrieve indexed geotechnical reports**
- **Integrate “Google”-like commercial software into DWGIS**
- **Hyperlinks from GIS features (SWMUs, buildings, etc.) to documents**



# Risk Assessment Module

- **Risk Reduction Standard Management**
  - Manage Background, PQL and Risk based
- **Risk Assessment Data Comparison**
  - Compare and report site data to the standards
- **GIS Viewer Risk Tool**
  - Spatially query and compare to standards
- **Advanced Temporal Plotting**
  - Include Rad-error, detection limit and advanced symbology to plots

# GIS Feature Extraction Module

- **High-level GIS data**
  - Extract data as GIS files
  - Download to GIS Analyst PC

## 3D Visualization Paper

- **Comparison of 3D Software**
  - DGI earthVision
  - C-Tech EVS