Applying the Software as a Service (SaaS) Model to Air Emissions Inventory Collection

Paul Baker
MACTEC
Overview

- Emission Inventory Data Collection
- What SaaS is
- Why the EIS is good for SaaS
- How SaaS works
- SaaS Benefits for Agencies
- What to look for when considering SaaS
- Who should consider SaaS
- Conclusion
Emission Inventory Data Collection

- Recurring process
- Shortened timeline
- Significant cost to streamline
- New approach - SaaS
What is Software as a Service (SaaS)

Typical Web Application Architecture
(hosted at agency)

- State/Local Agency
- Web Server
- Database Server
- Data Archive
- NE/EIS
What is Software as a Service (SaaS)

SaaS Application Architecture
(hosted by the vendor)

Application Vendor

Web Server

Database Server

Data Archive

State/Local Agency

NE/EIS

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SaaS Examples

Google Spreadsheet

TurboTax Online

EIS Gateway
The SaaS Model

- Shifts application burden
- Eliminates added costs and complexities
- Benefit of new technology
- Improves agency efficiency
Why SaaS is good for EIS

- Vendor handles data changes
- Common task oriented
- Single code base
- Vendor development cycle stability
How SaaS Works

- Establish host environment
- Grant access
SaaS Benefits for Agencies

- Faster implementation
- Removed environment responsibilities
- One code base
- Removed from security and archive responsibilities
- EIS and CERS compatibility
What to look for when considering SaaS

- Stability
- Subject matter knowledge
- Application suitability
- Data security / availability
- System security
- Integration
What to look for when considering SaaS - continued

- Specific needs
- Existing data
- Cost
- Support
Who should consider SaaS

- Non-compliant legacy systems
- IT infrastructure
- Budget
Conclusions

- Widespread acceptance
- Cost effect
- Shorten collection schedules