## PDF/SOLUTIONS® Connected Equipment Summit



## Development Highlights and Roadmap

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### Agenda

- 1. 2025 Highlights So Far
- 2. Short-term Roadmap: 6.1 December 2025
- 3. <u>Medium-Term Roadmap: 6.2 June 2026 (Tentative)</u>
- 4. Longterm Roadmap: Beyond Q2 2026

## 2025 Accomplishments

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## BMP Accomplishments in 2025

 2025-1 (released) – Infrastructure enhancements to scale to the ever-increasing number of sites, user experience pages, misc. improvements and fixes

 2025-2 (now in UAT) – Development process enhancements, misc. improvements and fixes

2025-3 – scope currently being defined

#### More on development process enhancements

- Release content defined and communicated before (or around when) development begins
- Adoption of agile
- More and smaller releases (6 9 weeks of development plus testing)
- More complete separation between development and production

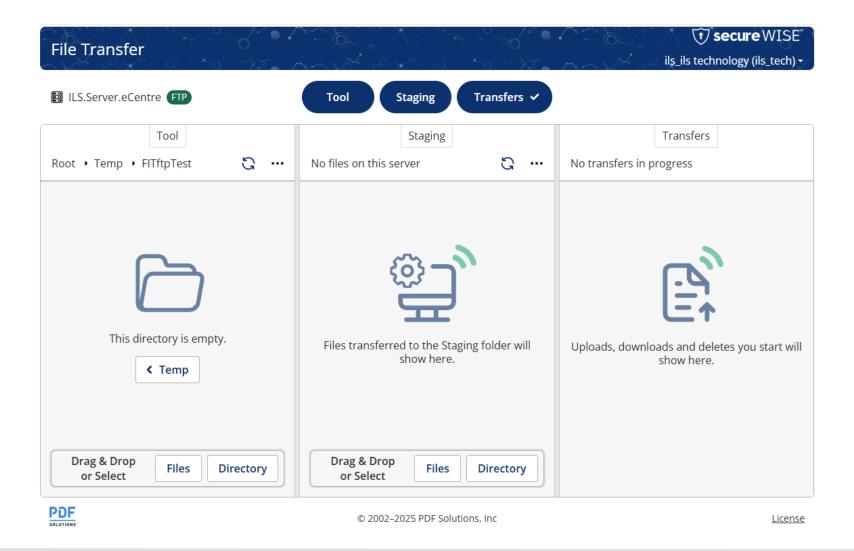


## secureWISE Releases in 2025

- 5.0.2.3 Websockets support in HTTP Proxy (Centos)
- 5.1.0.x secureWISE Server on Ubuntu, Websockets in HTTP Proxy (Ubuntu)
- 6.0.0.0 (Planned for GA Oct 9, rollout to begin Oct 20)
  - File Transfer Layer Rewrite (FT3)
    - SSEE Pause/Resume
    - RAA Support in SSEE
    - Launcher/Browser-based file transfer (FTP & RAA) (Demo)
    - File transfer speed improvements (50% or more)
  - Adaptive Staging
  - 24 third-party framework updates
  - Misc. feature and security enhancements and defect resolutions
- Four Operating System & Third-Party (OSTP) updates plus 6.0 includes additional OSTP updates



### Launcher/Browser-based File Transfer Demo



Development Enhancements in 2025

More complete adoption of Agile

• Much greater team involvement in "issue refinement"

Adoption of "story points" and all that entails

Expanded use of automated testing

• FT3 (a 6.0 feature) has 76 Automated tests that are run against 8 tool configurations with every build

Expanded use of AI

Initially MS Copilot and AWS's Amazon Q

Now MS Copilot and GitHub Copilot

• Examples:

- Analyze logs to assist in debugging
- Explain this code to me
- Scan this code for bugs and security problems
- Write code that does "X"
- Write unit tests for this code
- Etc.,
- Positions Added: a manual tester, currently interviewing for two new automated test positions and an additional developer



## **Short-term Roadmap**

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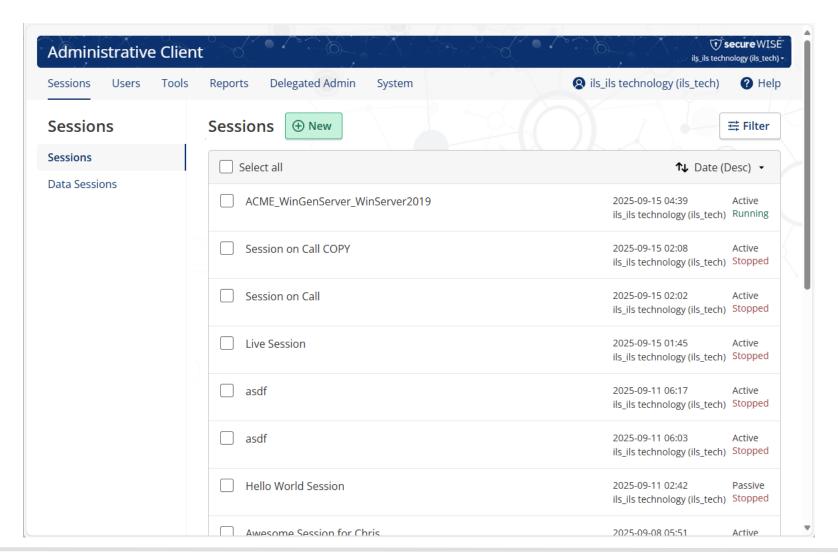
## 6.1, December 2025

#### Infrastructure

- Merge with the PDF build and deployment processes
- Migrate from CVS to Git (long overdue, must precede 6.1 development)
- Adopt tools to support improved development processes
  - More systematic and routine code reviews
  - Automatic code scans for performance, defects, and security
- SSEE: Download files via HTTP Proxy
- Admin Client (Demo)
  - New modern and responsive user interface
    - UI re-design completed in 2024
    - Implementation has been underway since February
  - Modern security posture
- Security enhancements including more third-party framework updates (moving target, required in every release)



### 6.1 Admin Client Demo





## Medium-term Roadmap

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## 6.2, Q2 2026 (Tentative)

#### Port Forwarding 2.0

Survive network hiccups w/out having to restart clients

Application caching

Proxy data over 443 with TLS rather than 80 with SSH encryption

Support UDP

#### Support for RealVNC as an Alternative to TightVNC

- Subject to one more prototype, to be completed in 2025
- Expect TightVNC support to continue for the foreseeable future

#### NIS/2, CRA, E187

- Features for managing tool CA certificates
- OAuth 2.0 with OpenID Connect (OIDC) support for authenticating to tools
- Support for FTPS (in addition to 6.0's support for SFTP)
- Support VNC servers with native support for TLS (in addition to the encrypted RTO that is already available for VNC servers that do not support TLS)
- **Security enhancements** including more third-party framework updates (moving target, required in every release)



## Longterm Roadmap

## Beyond Q2 2026 (Under Consideration for 6.3)

#### E188, E191

- Collect and report tool operating system details
- Provide for automated and manual collection and reporting of additional tool data

#### TCS-MES Integration

- Use tool state when allowing remote operations
- PDF Cimetrix tool software knowledge makes this a realistic objective

#### Fill in Zero-Trust Gaps

- ✓ Identity and Access Management (IAM): Strong authentication (e.g., MFA), role-based access.
- Device Security: Ensure endpoints meet security standards before granting access (see E191 immediately above and E187 in 6.2 above)
- Network Segmentation: Limit lateral movement within the network.
- OContinuous Monitoring: Real-time analytics, logging, and threat detection. (Looking into this now)
- DPolicy Enforcement: Dynamic access decisions based on context.
- Security enhancements (moving target, required in every release)



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