An Advanced Web App for Emergency Managers

The National Hurricane Program’s Technology Modernization effort includes the creation of a Web-based decision aid platform targeted to state, local and tribal emergency managers (EMs). This platform, known as HURREVAC-eXtended (HV-X), will be made available to EMs as an application that runs in standard Web browsers. This approach brings many advantages over the current-generation tools, which run as standalone, Windows desktop applications, as well as some technology-specific applications.

- **Instant update distribution**: When a bug is fixed or a feature is added, it will be available to users the next time they visit the HV-X website.
- **Mobile support**: Because the Web app connects to Web-hosted services, a clear path exists for future support of HV-X apps on mobile devices. These services will provide custom-crafted mobile apps with access to the platform’s full data set and capabilities.
- **Data flexibility**: Because HV-X supports popular Web standards, it can easily ingest a variety of products for map display.

**Web App Considerations**

HV-X has been developed to allow access to key information products even when the user’s Internet connection is down, or unreliable. Even though Web apps do not have full access to the storage capabilities of the user’s machine, HV-X takes advantage of a variety of browser mechanisms for saving data locally.

**Online Capabilities**

When a stable Internet connection is available (online), HV-X users can access a wide variety of information products, including, but not limited to:

- Current and archived storms (all products)
- Live weather conditions
- Evacuation zones
- High-quality base map
- Integrated training/gaming
- EM-specific data products
- Evacuation clearance time tables and timing guidance
- Storm Surge Explorer
- Simulated storm generator
- Hurricane evacuation studies

**Offline Capabilities**

When the Internet is down during an active storm, HV-X will continue to provide access to previously downloaded data. These key products will allow the user to visualize and analyze data for the currently active threat. These products include, but are not limited to:

- Active storm products, advisories and graphics
- Evacuation zones (reduced resolution)
- Low-resolution base map
- Evacuation clearance time tables (selected areas)
- Maximum of the Maximum Envelope of High Water or MEOW (selected areas)