IRWIN v12

Business Plan

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Executive Summary

Integrated Reporting of Wildland Fire Information (IRWIN) is the national data-integration service for the wildland fire enterprise. IRWIN connects federal agencies, state forestry organizations, local fire authorities, and tribal governments by synchronizing critical information across incident, resource, learning, frequency, and final fire reporting domains. This shared infrastructure ensures that participating systems operate from a consistent, authoritative source of truth, supporting coordinated decision-making, national situational awareness, and operational efficiency across jurisdictional boundaries.

The IRWIN v12 Business Plan defines the approved scope of work for the next release cycle. Its priorities reflect collaboration across leadership, technical teams, and subject-matter experts, aligning improvements with operational needs and national direction. While many enhancement ideas were considered, the detailed proposals and their dispositions are documented separately in the annotated Decision Log. This plan includes only the initiatives supported to move forward in v12.

Key Initiatives

IRWIN v12 advances a focused set of initiatives that strengthen IRWIN's role as the national integration service. Core improvements enhance multi-domain data exchange across incident, resource, learning, frequency, and final fire reporting information ensuring all connected systems receive timely, authoritative data. Standardized business rules continue to be refined to improve validation, reduce conflicting data, and increase confidence across agencies.

Workflow clarity and predictable system-to-system behavior remain essential priorities, ensuring that the coordination system, incident, land management agencies, and wildland fire intelligence and analytics can rely on IRWIN-enabled information during fast-paced operations. IRWIN v12 also reinforces support for accurate, comprehensive final fire reporting, the foundation for national reporting, analysis, and accountability.

Critically, IRWIN continues to drive nationwide efficiencies by identifying opportunities to streamline data exchange, reduce duplicative entry, and modernize integration patterns. Ongoing prototyping efforts remain central to this mission, allowing IRWIN to explore new technical approaches, validate emerging needs, and deliver improvements that reduce operational burden and increase value for federal, state, local, and tribal partners.

Strategic Themes

IRWIN v12 is guided by strategic themes that ensure the system remains effective, reliable, and future-ready. The first is strong, consistent interoperability so that every connected system operates from the same synchronized data. Operational reliability remains essential, given IRWIN's ability to deliver accurate, real-time information directly influences the safety, efficiency, and coordination of the wildland fire response network.

A user-centered focus guides how IRWIN evolves, emphasizing clear workflows, predictable interactions, and consistent business rules that reduce complexity for dispatchers, analysts, and fire managers. Transparent and scalable governance further ensures decisions are traceable, priorities are well-communicated, and IRWIN remains positioned to support modernization and expanding interagency needs.

Finally, IRWIN stays committed to continuous improvement and innovation, using prototyping and targeted modernization efforts to identify efficiencies, reduce complexity, and enable a more integrated and responsive wildland fire information environment.

Importance: Highest

*Data Clean-up / Resource fall-off rules

- Business Need: The system is less efficient when resources and associated capabilities linger in the integration databases beyond their usefulness.
- Requirement(s): Determine cleanup rules, while identifying any downstream impacts, so resources and associated capabilities can be offloaded from the integration database, resulting in reduced database size so the system can be kept efficient.

Targeted list

- IsValid = 0 Resource and Capability Records
- IsQuarantined Resource records - identifying which have been in quarantine longer than one month and then bringing to group to determine next steps
- Data alignment - Capability Requests align with CID for merged IROC records in IRWIN (will need help identifying these) (Merging Resources)
- CIDs associated with merged resources and the assigned CIDs on requests
- Resources - lat/long where they are located at 0,0 OR in Antarctica
- Deletion process
- Identify the records for deletion and notify systems of timing
- Currently a 'one-off' cleanup process; long-term will be looking for fall-off rules
- Provide lists to qualification and resource ordering systems for deleted records
- Make sure that any candidates for deletion for capability have never been put on a request.
  - Specific coordination with each system

*Needs additional refinement and documentation in specifications

***Possible adding a new data element of Pre-deletion Flag/ recycle bin / Flag for deletion

- Impacted Systems: CADs, IROC, IQS, IQCS, CFQMS

Resource Operational and General Status Alignment

- Business Need: As a connected system utilizing resources, I need to evaluate current data exchange of resource status between my system and the integration as well as other connected systems so that the user community can maintain resource status in one system rather than having to maintain status in multiple systems and identify gaps where additional statuses are needed.
- Business Need: Standardize CAD Resource Status i.e., All Statuses and their path in integration. Additional business rules/practices to be consolidated on white paper address with SME group.
- Business and system requirements to support "Available At-Incident" and does this apply to resources on prepositions?
- Impacted Systems: CADS, IROC, ICS 209

Validation

Unit ID

- Business Need: Currently there isn't validation in place to prevent connected system's end users from creating Incident records outside of business rules and recommended business

practices. Implementing validation for IRWIN unit IDs will significantly improve data accuracy and quality, resulting in more reliable and precise reporting of the operational landscape.

- Requirement(s): IRWIN will validate Unit Identifiers used for incident record creation supporting wildland fire roles
  - DispatchCenterID and POODispatchCenterID may only be populated with units whose wildland fire role is Dispatch/Coordination Center.
  - 'Dispatch/Coordination Center' cannot be a Protecting Unit or Jurisdictional Unit on a WF
  - Dispatch/Coordination Center can be incident host for Preposition or Support Event Category
  - Resource Provider Only unit identifiers cannot be utilized to create incident records
- Impacted Systems: All Integrated Systems – not a coding change but will receive error messages from IRWIN.

ETA and ETD (Mob and Demob)

- Business Need: Some systems are setting the ETD values on capability requests to be after the ETA values, which is causing validation issues in IROC as it violates business rules.
- Requirement(s): Overall validation proposal: ETD <= ETA <= DemobETD <= DemobETA; Essentially, IRWIN validates that ETD cannot be after ETA, DemobETD cannot be after DemobETA
- Requestor/Rationale: This was requested from IROC during a Tech Talk meeting on April 1, 2026.
- ETD <= ETA <= DemobETD <= DemobETA;
- Essentially, IRWIN validates that ETD cannot be after ETA, DemobETD cannot be after DemobETA; Comparison between mob and demob times should only occur if there are values in the demob fields.
- Handling nulls: If any values are null between ETA and ETD, do not compare. If any values are null between DemobETA and DemobETD, do not compare.
- ETD must not be null if ETA has a value; DemobETD must not be null if DemobETA has a value- probably too granular (might just be a best business practice). WildCADe is moving towards actual mob / demob times with some of the routing work
- IRWIN will validate that all four fields are not null when setting a 'FulfillmentStatus' = 'Closed' OR 'Reassign'.
- Pending requests that are cancelled may not have any mob values, diverts may be closed without demob times. For diverts, Demob times should be equal to the Mob ETD of the new request on 'Divert' workflow (will be added this to IRWIN specs). Pending requests that are never filled should not be Closed but rather Cancelled (No longer needed) or CancelUTF (No one was able to fill the request after being placed in one or more centers).
- Impacted Systems: Related Stakeholders: IROC, CADs

*Prevent names from containing the word "complex" "CPX", Training "TRNG" or "Fire"

- Business Need: WF names can currently include the word "complex," which is undesirable for clarity/business rules.
- Requirement: Add validation logic in WF creation/editing to reject names containing 'complex' (case-insensitive), with a clear error message to the user.

- Add following validation logic to Incidents IncidentName:
  - On add/update of IncidentTypeCategory WF, reject names containing ‘complex' or ‘CPX’
  - On add/update of IncidentTypeKind = FI , prevent the word 'Fire’ (case-insensitive)
  - On add/update of incidents where IncidentTypeKind != TR, prevent "Training" or "TRNG" (case-insensitive)
  - IRWIN return a clear error message to the user on why the request was rejected.

Validate Unique Fire Identifier

- Business Need: As a connected system, I need IRWIN to validate Unique Fire Identifier not only on create but also on update.
- Requirement: Add validation logic FI creation/update to reject duplicate Unique Fire Idnetifers, with a clear error message to the user.
- Impacted System: All

Importance: Medium

*Additional Data Element(s)

ResourceIdentifier" field and a "ResourceIdentifierType"

- Business Need: Ability to determine the authoritative field for uniqueness where multiple values are present but only one required.
- ** from Elisabeth: ResourceIdentifier - the unique identifier value of the resource (VIN, Serial Number, Tail Number, Service ID, etc). ResourceIdentifierType - identifies the type of identifier.
- Purpose is to consolidate these values into a single field to simplify validation and lookup. Uniqueness and/or look-up, is very conditional. The reason we not only need the identifier, but also the identifier type would support the effort. Is this just for vendor resources or for agency resources too? Business Rule: Does not apply to overhead resources.
  - "VIN" or
  - “SerialNumber" or
  - "ServiceID"
- Requestor/Rationale: IROC and IIPA (during contract work conversations)
- Impacted Systems: IROC, HEMS, IIPA

Integration of Supplies Iterative for v12 would focus on IIPA Service Supply needs.

- Business Need: As a connected system, I need an established system of record for agencies’ contracts and associated resource data so that the latest authoritative data is shared with the resource ordering system for users to fill capability requests appropriately
- Requirement(s): IROC and IRWIN ingest contract data from IIPA and E-ISuite groups. Addressing this gap will require adding supply catalog entries in specific cases and differentiating between traditional catalogs (e.g., OH), where resources associated with a CRID may not be unique and available quantities may be undefined. Are we talking about inventory or statused supplies or?
- Requestor/Rationale: The integration of Supplies is important because accurate, authoritative contract and resource data is critical to fulfilling capability requests effectively. Establishing a system of record and integrating contract data from IIPA and e-ISuite into IROC and IRWIN ensures users have reliable information, while addressing catalog gaps and non-unique resources improves accuracy and consistency in resource ordering.

- From a capability request perspective, we don't need to integrate those local purchases. COST SOR could fill in the cost data in that portion of the workflow.
- Is any of this already captured in ICLIP?
- Impacted Systems: IROC, IIPA, E-ISuite, FBMS

Integrate Smoke Check Category

- Business Need: As an internal or external data consumer, I have a common operating picture need to understand possible new, yet unconfirmed wildfires on the landscape. IROC would likely NOT read this in and primarily a CAD function.
- Recommended Business Rule – Not able to create incident category outside of the CAD
- Impacted Systems: CADs, IROC, FireCode

Importance: Low

*InFORM FODR Integration and Splicing Records

- Business Need: As an IRWIN connected system, I need to have access to the Fire Occurrence Data Record (FODR). Community has asked to consider related incident records in InFORM and how that translates back to IRWIN. There could be many-to-many relationships between InFORM and IRWIN records which could be a high lift for systems. InFORM side tables are being shared back to IRWIN, but not sure if the parent child relationships are.
- Also may have a utility with the NERIS work, INFORM believes they could complete the work in v12 and have available for other systems v13.
- Impacted Systems – Each system has a workflow implemented to manage Final Fire Reporting data based on Final Fire Report Status. Non-breaking change.

New System Integrations:

IIPA/ViPR Next Generation (Integrated Internal Procurement Application) cont'd

- Business Need: As a connected system, I need an established system of record for agencies' contracts and associated resource data so that the latest authoritative data is shared with the resource ordering system for users to fill capability requests appropriately. Phase two to add Land Use Agreements and EERAs
- Impacted Systems: IROC, HEMS, e-ISuite

California Counties (CAD)

- CONFIRE (San Bernardino) Central Square
- Impacted Systems: CAL FIRE (incident conflict detection), WildCAD, IROC, FireCode

Additional Learning Management Systems

- IRWIN is working with the learning management systems to facilitate the connection between LMS and the qualifications systems. IRWIN implemented the learning API in v9 and will support the systems to connect v10.
- Business Need: As a user, I need responder training to come into IRWIN and subsequently into the qualification systems.
    - IAT
    - CF QMS
    - Fire Engineering Training & Journal of Emergency Medical Services (FET & JEMS)

- Impacted Systems: IQS, IQCS, CAL QMS, EDG

*CAD – Louisiana Department of Ag and Forestry

- Have not received confirmation from Louisiana
- Will keep the community advised if there are changes.
  *Establish protocol, any proposed new system must commit by September 1 or will need to wait until subsequent version.

Incident/Fire Reporting System

- First Due CAL FIRE Incident Reporting Platform

Tentative V12.0 Milestones and Dates

- Business Requirements Drafted Friday, April 23, 2026
- Business Requirements Community Review (Spring Data Summit) Thursday April 30, 2026
- Release of Business Plan Friday, May 29, 2026
- Project Management Plan Published Friday, May 29, 2026
- Release Management Plan Published Friday, May 29, 2026
- Testing Plan Published Friday, May 29, 2026
- IRWIN "Feature Complete" Friday, August 28, 2026
    - This release contains code that addresses all new and updated functionality defined by the IRWIN Business Plan for that annual major version update. This is a functionally stable release but may have remaining bugs to be resolved as PATCHES and/or HOTFIXES. After the feature complete release, data elements and associated validation may be added with agreement from the Extended Teams. The feature complete release will be released on both TEST/next and OAT/next.
- Integration Specifications Published Friday, August 14, 2026
- Data Mapping Workbook Published Friday, August 14, 2026
- Initial API (Incidents and Resources) Build to TEST/Next Tuesday, September 15, 2026
- Initial API Build (Incidents and Resources) to OAT/Next Thursday, September 17, 2026
- Build Freeze Friday, December 18, 2026 - Sunday, January 3, 2027
- IRWIN Integration Release Friday, January 15, 2027
    - A functionally stable release with resolved critical bugs. This software release is deployed to the TEST/next and OAT/next during the week before Integration Testing. Following the integration release, no additional data elements or associated validation will be added without the Extended Teams agreement and retesting.
- Integration Testing Monday January 25, 2026 - Friday January 29, 2026
    - New Systems and high transaction systems
- IRWIN "Code Freeze" Friday, February 19, 2027
- IRWIN Production API Release Wednesday, March 3, 2027
    - A functionally stable release with resolved critical bugs. This software release is deployed to the Production environment.
- IRWIN Observer Production Release Wednesday, March 3, 2027