

DEFINE: AUDIT

“Audits” is commonly defined as an official inspection of an organization’s assets. For the purposes of this document, we use the term “audit” to describe the process of people exploring a site, locating assets, and scanning the unique identifier associated with the assets into TIPWeb-IT.

AUDIT’S GOAL:

Verify the established list of assets expected to be in a room or issued to staff/students on a site. Simultaneously, capture asset locations when they have moved from their expected location.

AUDITS PROCESS OVERVIEW:

The following is a top level diagram describing the contents of this packet. All three sections build to the intended goal... a lifecycle of audits currently assigned to rooms/sites within the district. This is a highly organized process of moving parts and collaborative teamwork between audits taking teams, district level decision makers, and the site level stakeholders.

This packet discusses the major milestones of the audit process and offers best practice guidelines.



Preparation

PREPARATION GOALS:

“Before anything else, preparation is the key to success.”
- Alexander Graham Bell

Preparing for the physical audit is important. Creating policies for how the audit team will handle different scenarios and standardize their actions across the district will reduce the time spent per site.

Areas to focus on prior to the physical audit are:

- Strategic Planning
- Define Scope of Work
- Communication Plan
- Compile Resources

STRATEGIC PLANNING:

Generic things to consider while preparing for physical audits:

- Define the **Scope of the Audit**
 - What sites require an audit?
 - What types of products should be included in the audit?
 - What types of rooms/staff/students on each site require someone to search for assets?
- Define the **Resources Available** during the audit
 - People
 - Who will make up the audit team(s)?
 - Devices
 - What scanning equipment is accessible during the audit process?
 - What mobile devices/laptops are accessible to the people comprising the audit team(s)?
 - TIPWeb-IT Applications & Application Access
 - Full TIPWeb-IT Application
 - TIPWeb-IT Mobile Site
 - TIPWeb-IT Mobile App
 - WiFi Access at each site
 - User permission roles for each audit team member
- Determine the **Stakeholders**
(any person with an interest or concern in asset tracking and/or the respective sites)
- Define the **Communication Plan**
 - Develop communication plan & timeline for each of the stakeholders

- Determine the **Amount of Notice Needed to Prepare** for the audit
- Review **Best Practices for Reconciling Site Audit Results**
 - Best Practice for reconciling audit results and in what order?
 - What decisions should be made when reconciling different tag audit states?
 - Misplaced:
 - Tags located on sites not expected to be on that site
 - Tags located in a different room than expected
 - Tags issued to students
 - Tags issued to staff
 - Missing
 - Tags not scanned during the audit
- Determine if **Additional Audit Sweeps** for lost items is required

SCOPE OF WORK:

DEFINE THE KINDS OF PRODUCTS TO INCLUDE IN THE AUDIT

- Determine the **Product Type(s)** to include in the audit.
 - This could include one or more **Product Types**
 - This limits the tags captured during the audit to identified **Product Type(s)** only
 - The audit will notify the user a “tag is not part of this audit,” if a tag for an unspecified **Product Type** is scanned
 - Provide the audit team a list of **Product Type(s)** expected within the audit
- Determine the district contact(s) decision maker to field questions regarding qualifying items
 - This person can add a product not already captured in TIPWeb-IT’s catalog found during the audit process
 - Provide this person’s name and contact information to the audit team
 - Be sure the contact will be available to field questions during the physical audit process

DEFINE THE KINDS OF ROOMS/STAFF/STUDENTS TO INCLUDE IN THE AUDIT

- Determine the **Room Type(s)** to include in the audit.
 - This could include one or more **Room Types**
 - This will include in the audit any rooms belonging to the respective **Room Type(s)** irrespective of tags associated to the identified **Product Type(s)**
- Determine the **Staff Type(s)** to include in a **Staff** audit.
 - This could include one or more **Staff Types**
- Determine the **Grade(s)** to include in the **Staff/Student** audit.
 - This could include one or more **Grades**
- Define the preferred process for auditing rooms/staff/students not present in TIPWeb-IT upon creation of audit.
 - Example: A room physically located on the site is not listed in TIPWeb-IT and, therefore, not in the district created audit

- After adding the room to the respective site in TIPWeb-IT, options include:
 - Ignore for the current audit
 - Include the room (by **Room Type**) in another sweep (2nd audit for the same site) of the building
 - Create a single **Room Audit** for the room
 - Complete and reconcile separately from the district created site audit
 - Staff/students added to the respective site in TIPWeb-IT after the audit has been created will not be included in the respective audited.

DEFINE THE PREFERRED PROCESS FOR IDENTIFYING ITEMS WITH NO TAG

- Define the preferred process of dealing with qualifying assets missing asset tags
 - Search by serial number, if available
 - If found:
 - Apply new asset tag
 - Edit Tag in TIPWeb-IT to identify the new asset tag
 - Scan item into audit for the respective room/staff/student
 - If not found:
 - Set policy when to perform one of the two options:
 - Initialize an item using a new asset tag
 - Scan item into audit for the respective room
 - Put item aside and research before taking any action
 - The item may be on an open purchase order and has not been fully identified in TIPWeb-IT

DEFINE THE NUMBER OF SWEEPS THE AUDIT TEAM MAKES PER SITE

- Set the policy for circumstances where an additional audit sweep could be required for quality assurance purposes

COMMUNICATION PLAN:

- **Define the Communication Plan**
 - Develop communication plan & timeline for each of the stakeholders:
 - Who are the district level and site level stakeholders?
 - Who are the back-up stakeholders if the normal stakeholders are unavailable during any part of the audit process?
 - What are the most effective methods of communication with stakeholders?
 - Ex: email, internal district notifications, text messages, personal phone calls, etc...
 - When will the audit take place?
 - Why is the audit happening?
 - What is in it for the various stakeholders?
 - Why should they care about this audit being performed successfully?
 - What sites will have audits performed?
 - What types of items and what locations (room/staff/student) on each site is the audit focused?
 - How does it affect each site?
 - Will this interrupt normal business?

- Should site staff label their personal assets in a specific way and/or take those items home during the audit process?
 - What are the answers to a common list of questions?
 - Ex: Can we opt out? Can we reschedule? What if we can't find what we are looking for? Are we going to receive a copy of the audit results? Do we have to help the audit team locate items?
 - Who should the site stakeholders contact with questions?
- **Establish the Notification Timeline for Preparation of the Audit**
 - Calculate the lead time needed to communicate with all stakeholders
 - Consider the time of year and the other duties of the stakeholders
 - Estimate the time needed for stakeholders to perform any requested tasks prior to the audit date(s)
 - Analyze the site level variables to gauge the time it takes to perform an audit at each site
 - **# assets / audit team** (corresponds to # of scanners) **X accessibility of rooms on sites** (includes consideration of staff/students present at time of audits) = **how long it takes to audit a site**
 - Add the **communication plan's time span** with the **site audit's processing time span** per site type
 - This is the number of days needed to fully communicate with and have the respective sites ready for the audit teams
 - Failure to give adequate time to the stakeholders could adversely affect the audit process

RESOURCES:

PEOPLE

- Audit Team
 - **Team Lead**
 - One person per team
 - TIPWeb-IT Role: Site Level Administrator or higher
 - Assigned Tasks: District approved decision maker for respective site and has been assigned TIPWeb-IT Site Administrator permissions
 - If applicable, they can re-open an audit from **Finalized** to **In Progress** by selecting **Deny** (in the **Audits** screen)
 - Identify rooms (usually with post-it notes), staff and/or students included in the audit
 - Review audit location type(s) (rooms/staff/student) audit scan results
 - If the results look reasonable:
 - Change the audit's status to **Finalized**
 - Remove the post it note from the room
 - If the results are lacking:
 - Ask audit team to process the location type(s) (room/staff/student) again in the same **In Progress** audit
- Reviews all **Finalized** audits within the site audit one more time prior to submitting the results to the district
- If the results look reasonable:
 - Approve the site audit

- Warning: Once a site audit is approved, the site audit and all the room audits within it are no longer eligible to **Deny** and, therefore, **Edit**
 - If the results are lacking:
 - Deny the respective **Finalized** room audit(s)
 - Ask audit team to process the room again in the same **In Progress** room audit
- **Quality Assurance**
 - One or more people per team
 - TIPWeb-IT Role: n/a
 - Assigned Tasks: Prepares the room for the auditor and puts items back after the auditor has scanned room
 - Open cabinets, closets, and other storage areas
 - Pull out qualifying items (targeted Product Types)
 - Place item displaying tag where most easily accessible for scanning
 - Put all items away after the Auditor has scanned each qualifying tag in the room
- **Auditor**
 - One person per team
 - TIPWeb-IT Role: Site Level User or higher
 - Assigned Tasks: locate and scan items into TIPWeb-IT
 - Warning: Only one person scanning tags into a specific room audit is recommended

DEVICES

- Scanners
 - One for each auditor and/or team lead
 - Each scanner is able to read 128A symbology
 - Can be wired/attached or wireless/Bluetooth enabled
 - Must be compatible with the identified laptop/mobile device
 - Attach/pair to the desired laptop/mobile device
 - Best Practice: Test the connection between the scanner and the laptop/mobile device prior to the start date of the audit
- Laptop
 - One for the team lead
 - Able to reliably access the internet and the district's network
 - If SSO, district network credentials for the audit team members
- Mobile device(s)

(EX: smart phone, tablet, netbook, laptop, etc...)

 - One for each member of the audit team
 - Able to reliably access the internet and the district's network
 - If SSO, district network credentials for the audit team members

HAYES SOFTWARE SYSTEMS APPLICATIONS

- TIPWeb-IT full application
 - For the team lead using a laptop
 - Access in internet browser (Google Chrome is ideal)
- TIPWeb-IT App

- For the auditor using a smart device
(EX: smart phone, tablets, etc...)
 - Download to each respective smart device from iTunes or Google Play stores
- TIPWeb-IT Mobile View
 - For the auditor using a mobile device
(EX: netbooks, laptops, etc...)
 - Access in internet browser (Google Chrome is ideal)

MISCELLANEOUS

- Extra asset labels
 - **In case qualifying assets are missing tags**
- WiFi Information/Hot Spot(s)
 - **Making sure internet and network access is always available**
- Post it notes (suggested)
- Site specific details (suggestions)
 - Site stakeholder name and contact information
 - Name of site specific person who will be onsite to advise audit team on room locations, asset locations, and provide access
 - Verified physical audit date/time period
 - Map of site
 - Mark rooms with times when not occupied
 - Mark rooms that will not be audited

AUDIT PROCESS

PRIOR TO THE AUDIT:

The following list the items to watch for before starting a site audit. They help the audit process run more smoothly.

- All rooms are reflected in TIPWeb-IT and have been assigned a Room Type.
- All Staff and Students are included in TIPWeb-IT.
- No Audits are currently in progress for the site.
- All tags transferred to sites have been received.

CREATING THE AUDIT

District level creates site audit for one or more sites at the same time

- The created date is important when reconciling the audit results
- Warning: Do NOT create additional site audits until all previous site audits have been reconciled

1. Make Audit Name descriptive

- Reflect the kinds of product types, room types, staff types or student grades targeted in the audit
 - Example: For a spot audit focused only on desktop computers used by administrative staff, the audit name could be called “Desktops in Offices Summer 2015”

2. Identify the sites to be audited during the same date/time block

- If the plan is to audit 4 elementary schools, 2 middle schools, and 1 warehouse location in one week, include just those sites in the creation of the audit.
 - This allows the creation date to be used in the reconcile process.
 - The most recent **Tag Audit State** is displayed in the reconcile audits grid. Therefore, it is important for audits conducted and finalized during a specific period of time to be reconciled together.

3. Identify the Product Type(s), Room Type(s), Staff Type(s), and Grade(s) to be targeted in the audit across the selected sites

- Warning: Not all sites have the same types of rooms, staff, grades, and/or products. Group sites on spot audits with like items that will be audited within the similar window of time.

4. Decide if ignoring tags modified after a certain date is necessary

- Utilize this setting if a large shipment of tags were just processed and it is determined it is not necessary to scan them again in an audit.
 - Example: Friday of last week 200 new laptops were tagged, received into TIPWeb-IT, and placed in the status of available in the Warehouse Storage. This week the district will perform an audit which includes laptops. It is decided they audit team does not need to scan all 200 laptops again.

5. Determine if the audit should be restricted

- If selected, this setting restricts **site level user roles** from:
 - **Finalizing** an audit within the respective room
 - This forces the **site level administrator** role(s) to **Finalize** all room audits
 - a. Example: The audit team's team lead
 - **Deleting** a district created room audit
 - This reduces the possibility of human error from occurring
 - **Removing** product(s) from a district created room audit
 - This removes the possibility of products being removed from the audit when it was included as a targeted Product Type

DURING AUDITS

Audit team goes through each site and performs their assigned tasks using their respective resources. (see **Audit Team** definitions for details)

1. Audit Team arrives on site

2. Meets with and confirms their plan of action with site stakeholders

- Referring to the communication plan previously established and distributed
- Requests and collects site specific items necessary for physical audit of site
 - Examples:
 - Map of site
 - List of rooms which are empty of staff and students by time brackets
 - WiFi access information
 - Set of keys needed for rooms, carts, cabinets, etc...

3. Audit Team performs predetermined audit preparation work using the resources available

4. Start the physical audit process

- Enter a room number, staff ID/name, or student ID/name in the location field in the TIPWeb-IT audits screen
 - An audit waiting to be utilized in the status of **New**
 - Auditor start scanning tags into audit
- **Finalize** the audit when all qualifying products/tags in the audit have been scanned

5. Audit team performs reviews

- Team lead reviews each audit record for all possible assets to be scanned and items which may have been overlooked
- If any audit requires additional scans, the team lead will **Deny** the **Finalized** audit

6. Team lead Approves site audit & submits results to the district for reconciling

- Review all audit records one more time after all have been physically scanned, the respective number of sweeps have been accomplished, and all audited rooms/staff/students are marked as **Finalized**
- This submits the site audit results to the district allowing the data to be reconciled

THINGS TO AVOID:

- Do not allow more than one person (auditor) to scan tags into a single audit.
 - If resources allow multiple people to scan tags simultaneously, have each person assigned scan tags into separate room audits, or assign people to different audit types (i.e., room, staff, or, student audits).
- Do not have multiple tabs or instances of TIPWeb-IT open within the same device at one time.
 - Example: Team lead has a Google Chrome browser with 5 tabs of TIPWeb-IT open at the same time.

Reconcile Data

REVIEW SITE AUDIT DATA

The district level created the site audit and is responsible for reconciling the data. An Administrative Administrator will use the TIPWeb-IT **Reconcile Audit** screen to take various action(s) on the **Finalized** and **Approved** site audit results.

Any tag **Verified** or **Found** in the audit does not require action. However, **Missing** and **Misplaced** tag audit states will require the district's attention. The instructions below assume the audit location for a **Room** audit is the desired location of the items scanned – rather than the expected location. **Misplaced** tags are **Collected** to the audit location to reflect where they are actually residing. **Staff/Student Misplaced** tag audit states not acted upon during the audit assume the audit location should be **Ignored**. **Staff/Student Missing** tag audit states not acted upon during the audit assume the audit location should be **Lost**.

Warning: The order of reconciling is important. The reconcile grid displays the most recent **Tag Audit State** and those that also need reconciliation first.

TAKE ACTION ON RESULTS

BEST PRACTICE: Review any site created **Audit Notes** (located in the **Actions** column) associated with tags prior to reconciling. These notes are intended to provide the district with additional information regarding the specific tag's audit state.

1. Reconcile **Staff/Student** audited tags
 - These are items issued to staff/students that have been scanned in the audit, Note: action may have been taken on many of these tags during the audit process
 - This means only those tags for which **Missing** should be set to **Lost** or **Misplaced** should be **Ignored** will require action
 - Filter for "Audit Type" of Staff and/or Student
 - Filter for the specific site audit(s) created and performed
 - Audit Name = **Desired Audit**
 - Site Name = **Desired Site**
 - Tag Audit State = **Missing** then **Misplaced**
 - Room Audit Status = **Finalized**
 - Show Only Approved = **Toggle on**
 - Use the bulk **Reconcile** tool
 - Audit State = **Missing**
 - Action = **Lost**
 - Audit Notes = **as desired**
 - Use the bulk **Reconcile** tool
 - Audit State = **Misplaced**
 - Action = **Ignore**
 - Audit Notes = **as desired**

2. Reconcile **Missing Room** audited Items to **Lost**
 - These are items not verified in the rooms they were expected to be located within and this process changes their tag status to **Lost**
 - This allows reports to be run on the missing/lost items
 - Filter for the specific site audit(s) created and performed
 - Audit Name = **Desired Audit**
 - Site Name = **Desired Site**
 - Tag Audit State = **Missing**
 - Room Audit Status = **Finalized**
 - Show Only Approved = **Toggle on**
 - Use the bulk **Reconcile** tool
 - Audit State = **Missing**
 - Action = **Lost**
 - Audit Notes = **as desired**

3. Reconcile **Misplaced Room** audited items by **Collecting** them to their audit location
 - These are items expected to be located in one room, but scanned in another room.
 - Filter for the specific site audit(s) created and performed
 - Tag Audit State = **Misplaced**
 - Room Audit Status = **Finalized**
 - Show Only Approved = **Toggle on**
 - Audit Date = **“Equal to” the respective date this audit was created**
 - Warning: this makes sure you are affecting only the tag data in this audit
 - Use the bulk **Reconcile** tool
 - Audit State = **Misplaced**
 - Action = **Collect**
 - Audit Notes = **as desired**

MANUAL RECONCILE PROCESS

BEST PRACTICE: Review any site created **Audit Notes** (located in the **Actions** column) associated with tags prior to reconciling. These notes are intended to provide the district with additional information regarding the specific tag's audit state.

- **Exceptions to the Bulk Reconcile Process**
 - **Asset Types** of **Parent** and **Component** are not eligible for bulk reconciling
 - Use the **Select Action** drop down menu located in the tag's row (located under the **Actions** column)
 - Choose the desired action from the respective menu
 - Enter any desired notes into the **Notes** field

There are multiple reports available to review the tags included in the audit. The two most helpful are the following:

1. **View Audit Detail Report**

- This report is accessible to the Administrative Administrator level on the **Reconcile Audits** screen
- It provides a listing of the tags and their displayed audit state based on the filters applied to the **Reconcile Audits** grid and by the available audit filters

2. **Tag Listing Report**

- This report is accessible to the Administrative Administrator level on the **Tags** screen
- Use this report to list all of the tags in status of **Lost** filtered by the last modified date when the audit was reconciled.
 - i. Manipulating the columns within the **Tags** grid, by adding or removing TIPWeb-IT data fields, controls the data displayed in the Tag Listing Report