



Optimizing collaboration during certification of digital infrastructure

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Agenda

- Which pain points and causes for time wasted need to be addressed ?
- How does a SaaS based solution improve the situation significantly even with minimum changes to the current work flow ?
- How does a full implementation with more elements available in the management tool help to improve the situation even further ?



800+ Installers VOCs:

Top eight problems (hours wasted)



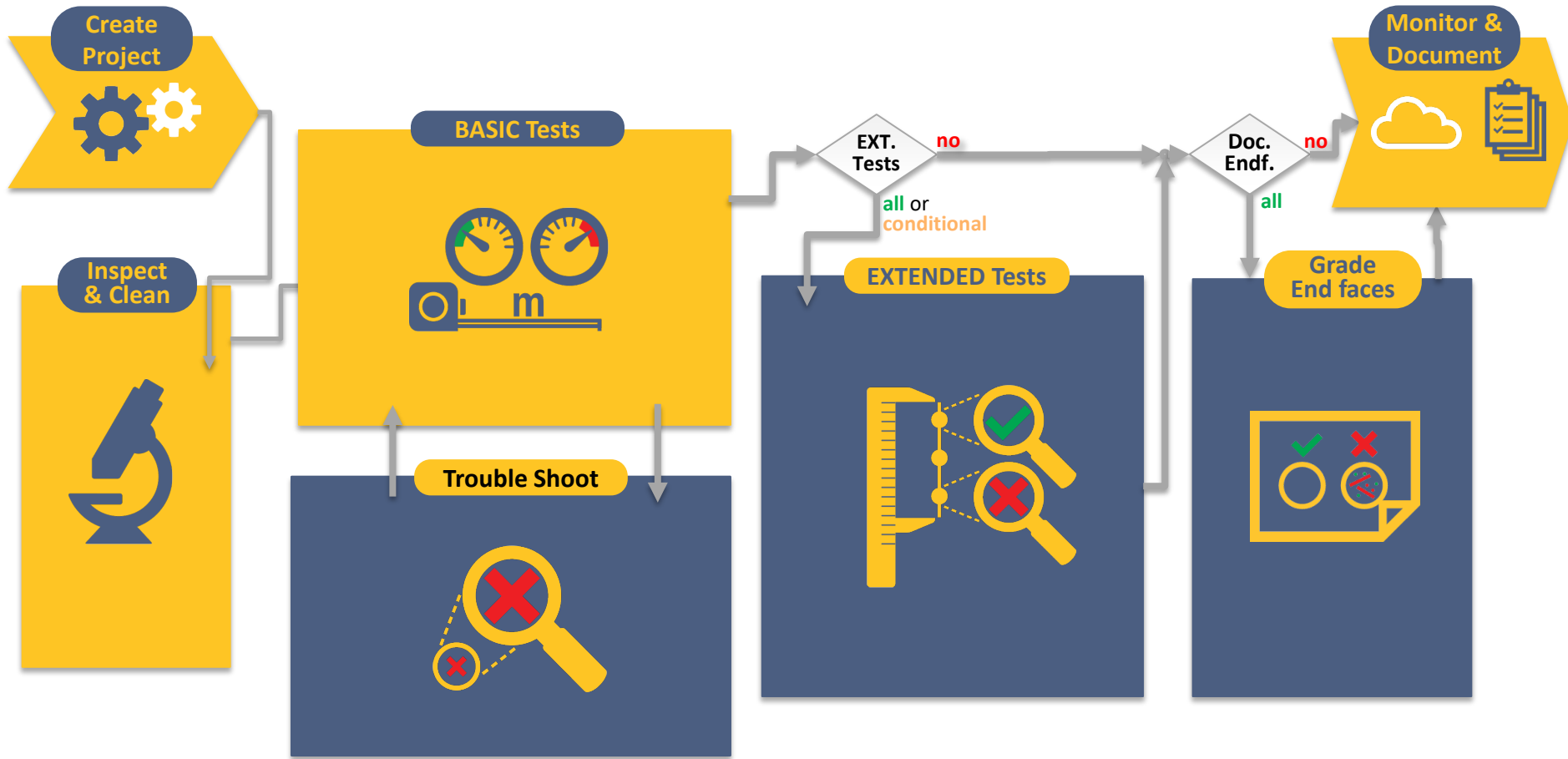
Pos.	Problem	hours
1.	WRONG COPPER LIMIT	4.3
2.	INCORRECT CABLE ID's	3.2
3.	CONSOLIDATING RESULTS	3.1
4.	SETTING UP COPPER TEST	2.9
5.	EVALUATING OTDR TRACE	2.9
6.	WRONG FIBER LIMIT	2.8
7.	NEGATIVE LOSS	2.8
8.	TROUBLESHOOT COPPER	2.7

Average amongst all respondents in the previous 30 days



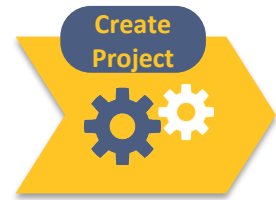


Step 1: Project Definition





... Project Definition



- Limits, Cable Types, Cable ID are best known by the planner/project-manager
- New relaxed ISO limits do not reflect what is possible and/or needed to be future ready → **Custom Limits**





Building Blocks ... Project



- Cable Type(s)
- Test Limit(s)
- Cable ID Lists(s)
- Test Regime
 - Copper
 - Fiber
 - BASIC (LSPM)
 - EXTENDED (OTDR)
 - End Face Grading



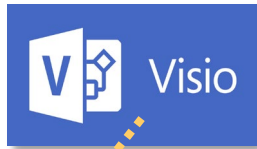


SaaS Minimum Rollout "USB Stick in the Cloud" Model

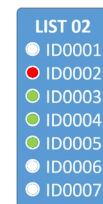
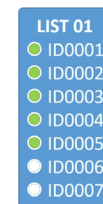
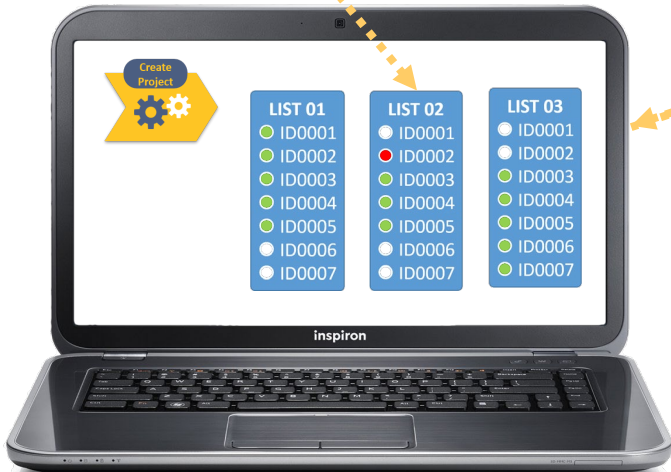




SaaS *Standard Rollout* PM defines entire Project in a SaaS



...many more





Projects Change Links Were Added



- Verify limits
- Update Documentation
- Create Invoice



Projects Change

Test Criteria Was Modified



- Verify limits
- Update Documentation

Example:
Some links need to be tested to MPTL instead of PL Limits



SaaS Minimum Rollout "USB Stick in the Cloud" Model



3. Charles Puller - Technician

- Fixes **FAIL**ing link LWL-W-F2-013
- Tests link EXTRA-01



LIST 01	LIST 02	LIST 03
● ID0001	● ID0001	● ID0001
● ID0002	● ID0002	● ID0002
● ID0003	● ID0003	● ID0003
● ID0004	● ID0004	● ID0004
● ID0005	● ID0005	● ID0005
● ID0006	● ID0006	● ID0006
● ID0007	● ID0007	● ID0007



4. John Master Project Manager verifies the progress and test results

LIST XX
● XTRA01
● XTRA03
● XTRA03





John: verifies the progress and test results...

The screenshot shows a web application interface with a navigation menu at the top containing 'DASHBOARD', 'USERS', 'ASSETS', and 'HELP'. The 'ASSETS' section is active. A table lists various assets with columns for status (green checkmarks), ID, name, last sync time, and user. A tooltip is visible over the table, indicating a 'Past recommended calibration date of 12/02/2016'. To the right of the table is a map of Mödling, Austria, with a location pin and address details: '8 Bernhardgasse, Mödling, Niederösterreich, 2340, Austria'. The map is credited to Google. Below the map, there are fields for 'Sync Location' and 'Synced By Charles Puller'. At the bottom of the page, there are links for 'System Status', 'Privacy Policy', 'Terms of Use', and 'About Us'.

Status	ID	Name	Last Sync	User
✓	2336011		12 minutes ago	Charles Puller
✓	2466092		12 minutes ago	Charles Puller
✓	2336020		12 minutes ago	Charles Puller
✓	1946004	CCTT 3	10 days ago	Charles Puller
✓	1944005	CCTT 3	10 days ago	Charles Puller
✓	2188225		30 days ago	Charles Puller
⚠	2353002		30 days ago	Charles Puller
✓	2461579		about 1 month ago	Charles Puller
✓	1612018		about 1 month ago	Charles Puller
✓	3409007		about 2 months ago	Charles Puller
✓	3386819		about 2 months ago	Charles Puller
✓	1612015		about 2 months ago	Charles Puller
✓	3386816		about 2 months ago	Charles Puller
✓	3409008		about 2 months ago	Charles Puller

Map data ©2017 Google

Sync Location: 8 Bernhardgasse, Mödling, Niederösterreich, 2340, Austria

Synced By: Charles Puller



SaaS ... Minimum Rollout

“USB Stick in the Cloud” Model



- Charles Puller - Technician
 - Fixes **FAIL**ing link LWL-W-F2-013
 - Tests link EXTRA-01



- | LIST 01 | LIST 02 | LIST 03 |
|----------|----------|----------|
| ● ID0001 | ● ID0001 | ● ID0001 |
| ● ID0002 | ● ID0002 | ● ID0002 |
| ● ID0003 | ● ID0003 | ● ID0003 |
| ● ID0004 | ● ID0004 | ● ID0004 |
| ● ID0005 | ● ID0005 | ● ID0005 |
| ● ID0006 | ● ID0006 | ● ID0006 |
| ● ID0007 | ● ID0007 | ● ID0007 |



- John Master Project Manager
verifies the progress and test results

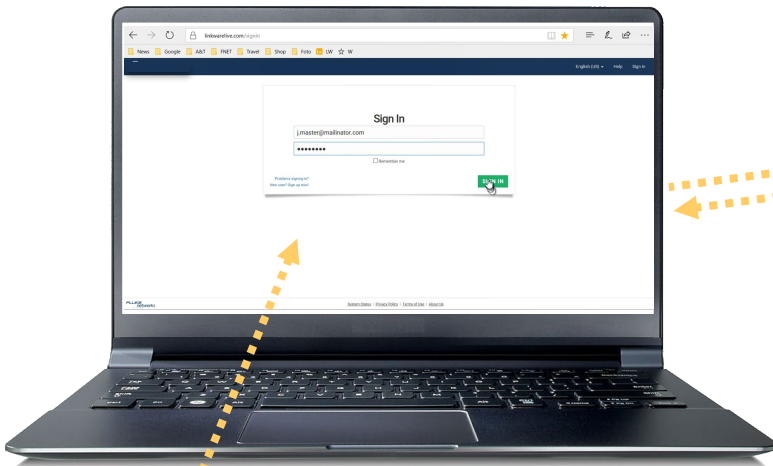
- | LIST XX |
|----------|
| ● XTRA01 |
| ● XTRA03 |
| ● XTRA03 |





SaaS ... Standard Rollout

John defines entire Project LWL Bank East in a SaaS

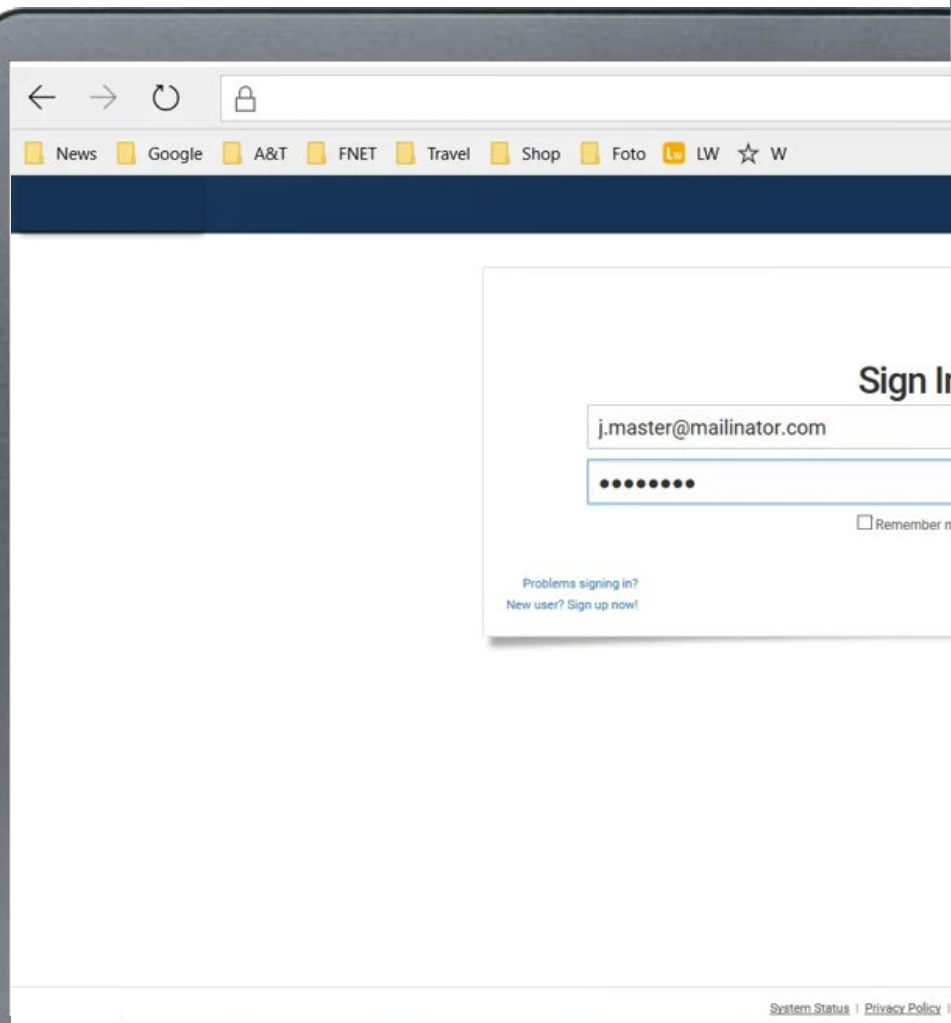


- | LIST 01 | LIST 02 | LIST 03 |
|----------|----------|----------|
| ● ID0001 | ● ID0001 | ● ID0001 |
| ● ID0002 | ● ID0002 | ● ID0002 |
| ● ID0003 | ● ID0003 | ● ID0003 |
| ● ID0004 | ● ID0004 | ● ID0004 |
| ● ID0005 | ● ID0005 | ● ID0005 |
| ● ID0006 | ● ID0006 | ● ID0006 |
| ● ID0007 | ● ID0007 | ● ID0007 |





John defines entire Project LWL Bank East in a SaaS



LWL Bank East

Sep.1 to Okt.1

Configuration : LWL-B-SOW-MM
Limits from LWL Bank Std „LWL-B-SOW-MM“
Con. 0.4 / Spl. 0.1 / 3.2/1.2 dB/m

→ Test Limit: „LWL-B-SOW-MM“

Cable ID List 1:

LWL-E-F1-001A ...

LWL-E-F1-016B

Cable ID List 2:

LWL-E-F2-001A ...

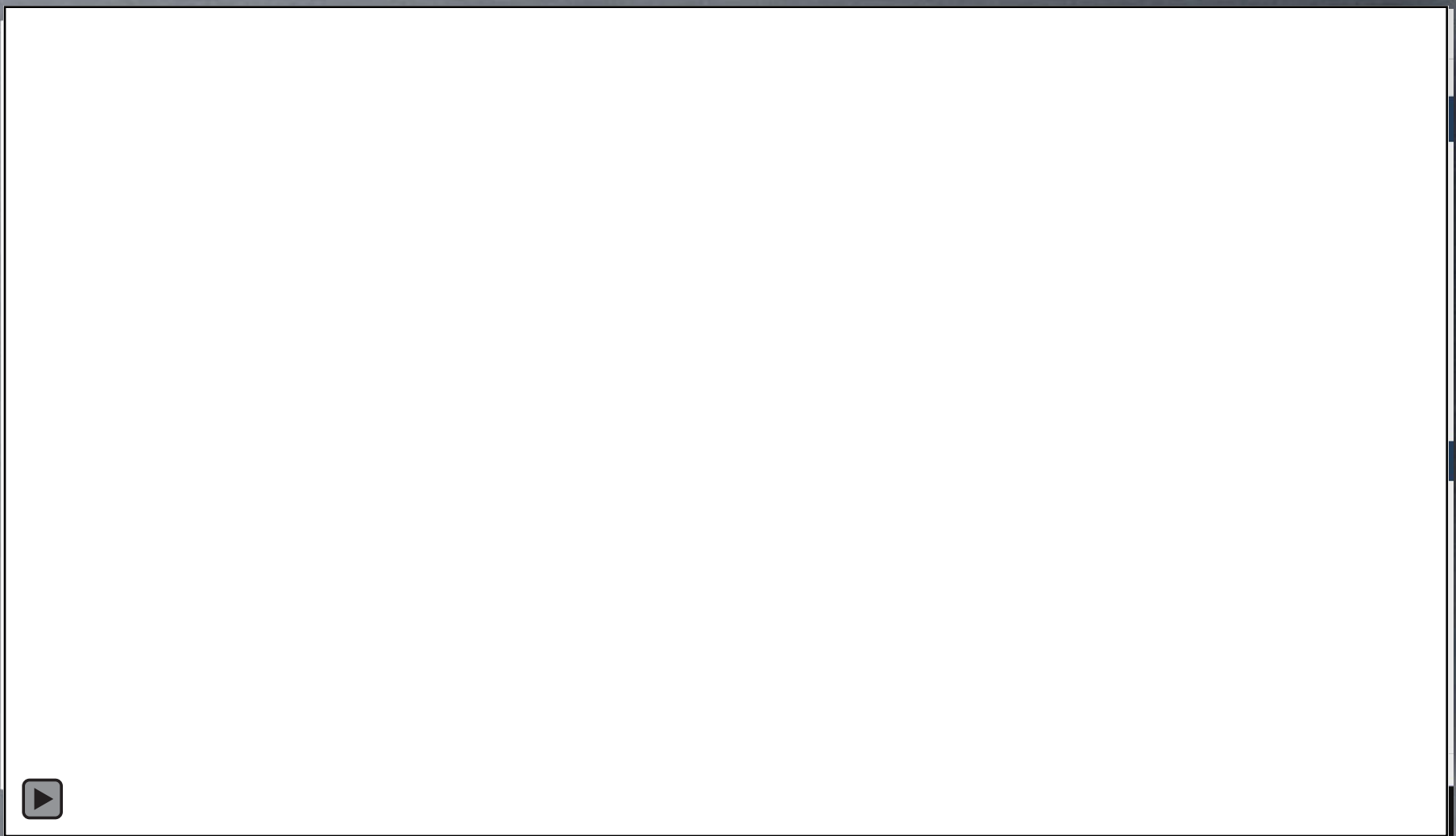
LWL-E-F2-032B

List 3: Import from Back Bone Plan
BB-01

Technican C.Puller



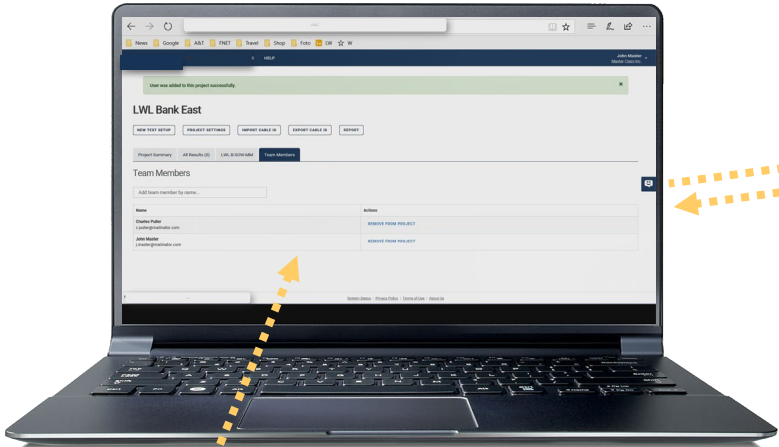
*John defines entire Project **LWL Bank** East in a SaaS*





SaaS Standard Rollout

John defines entire Project LWL Bank East in a SaaS



1. John Master - Project Manager defines the entire project in LWL
2. Charles Puller – Technician receives new project

LIST 01
● ID0001
● ID0002
● ID0003
● ID0004
● ID0005
● ID0006
● ID0007

LIST 02
● ID0001
● ID0002
● ID0003
● ID0004
● ID0005
● ID0006
● ID0007

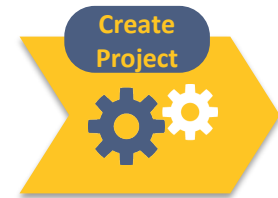
LIST 03
● ID0001
● ID0002
● ID0003
● ID0004
● ID0005
● ID0006
● ID0007





800+ Installers VOCs:

#2 & #3 relate to cable ID's



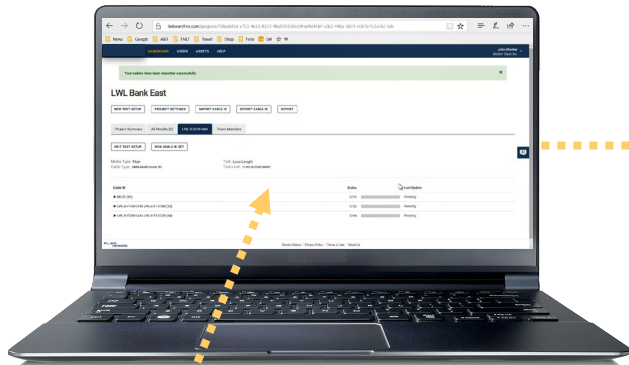
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8.	TROUBLESHOOT COPPER	2.7

Incorrect / duplicate / missing / unexpected IDs make consolidation a nightmare





Labels



- | LIST 01 | LIST 02 | LIST 03 |
|----------|----------|----------|
| ● ID0001 | ● ID0001 | ● ID0001 |
| ● ID0002 | ● ID0002 | ● ID0002 |
| ● ID0003 | ● ID0003 | ● ID0003 |
| ● ID0004 | ● ID0004 | ● ID0004 |
| ● ID0005 | ● ID0005 | ● ID0005 |
| ● ID0006 | ● ID0006 | ● ID0006 |
| ● ID0007 | ● ID0007 | ● ID0007 |





Labels

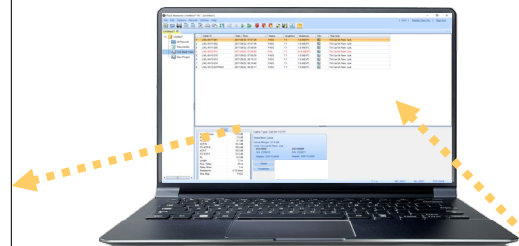
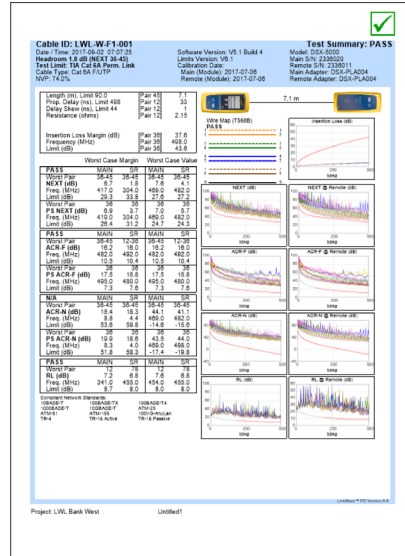




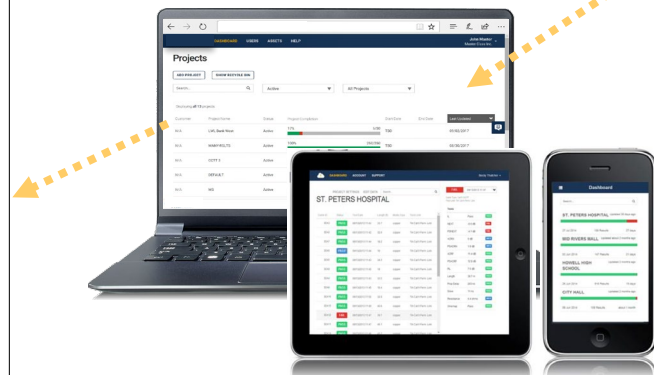
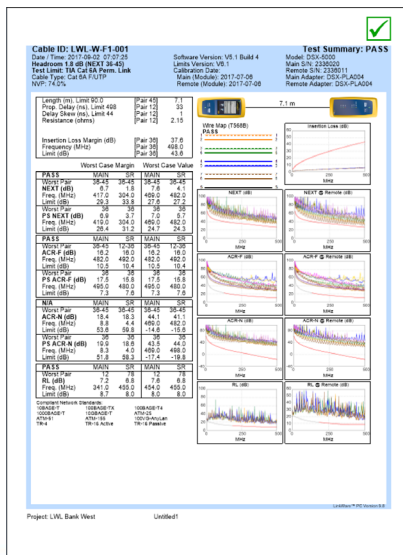
SaaS & Traditional ... Reporting



#1 "The Standard" reporting or sharing of secure result files

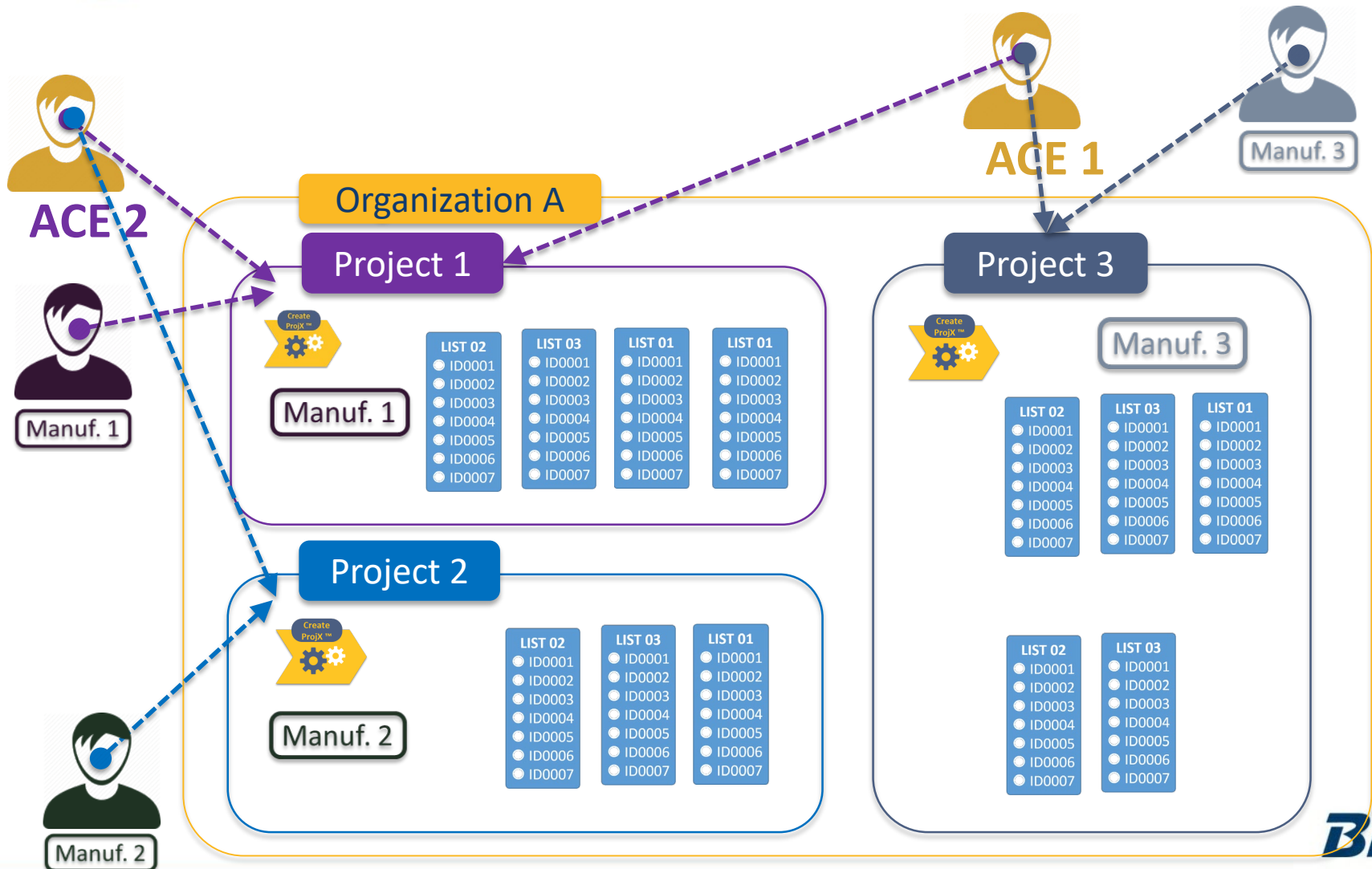


#2 Ad Hoc reporting via e-mail triggered from mobile devices



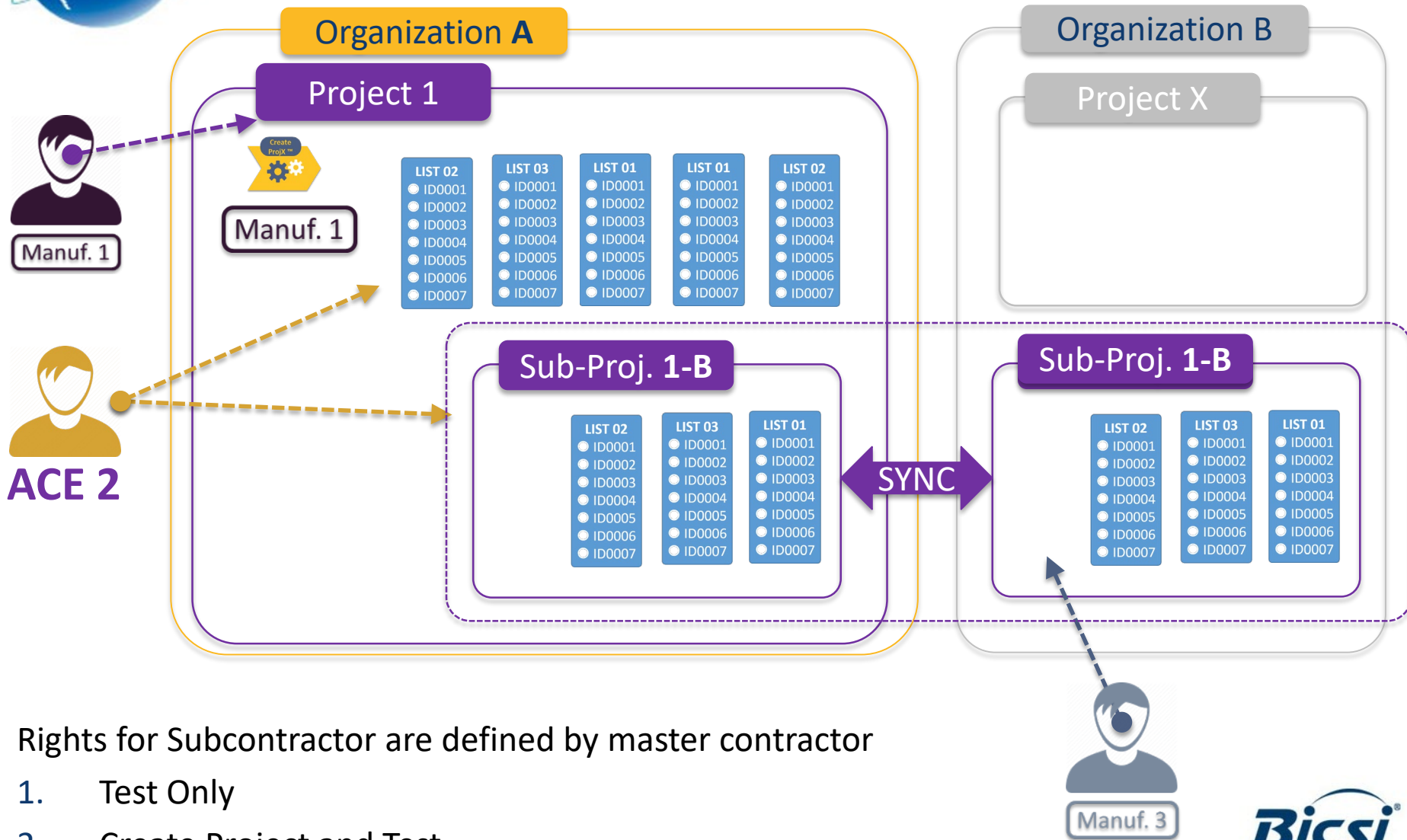


Visibility for ACE's & Manufacturers





Sub Contracting

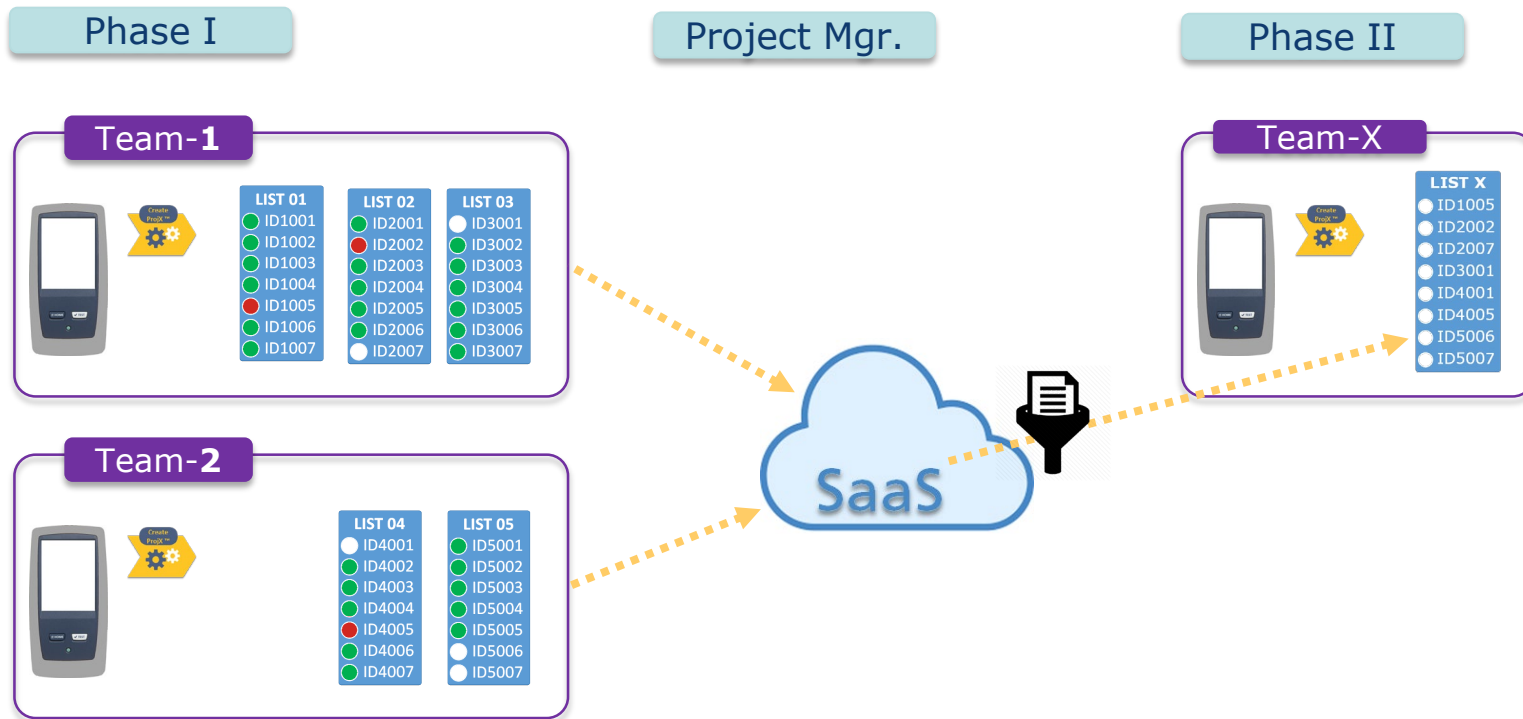


Rights for Subcontractor are defined by master contractor

1. Test Only
2. Create Project and Test



Collaboration between Teams





Conclusio

SaaS based project management tools....

- Help to prevent expensive configuration mistakes
- Allow those with access to the SOW, meeting notes, correspondence and contracts to define the scope of work
- Help to prevent gaps, duplicates and uncertainties in the consolidation process
- Help to monitor the progress of work
 - Dispatch experts as needed
 - Add additional resource as needed
- Allow to involve ACE's, Manufacturer's SE end customers as observers or administrators
- ... **become the core of a "Certification Eco System"**



Thank You for Your Attention !

Questions ?

END