Welcome to Railinc's Umler Training Resources

- Training Module Series
 - Umler: Getting Started
 - Umler: Core Functions 1
 - Umler: Core Functions 2
 - Umler: Administration Functions
- Training Module Slide Sets
- Web demos on Railinc.com



Umler: Core Functions 1 Agenda

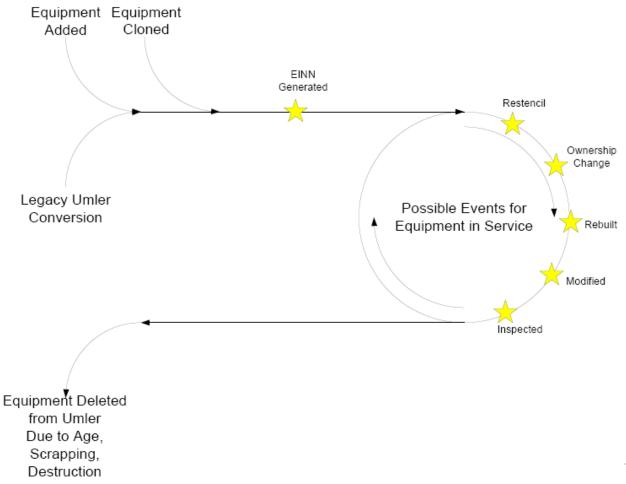
- Introduction & Review
- Lifecycle of Piece of Equipment
- Add/Clone Equipment
- Modify Equipment
- Restencil Equipment
- Query Equipment
- Summary



Introduction



Lifecycle of Piece of Equipment





Equipment Status

Pre-registered – Equipment being built that is not yet active

Active – The Umler record defines a physical car with the matching equipment ID stenciled on the asset

Inactive – Umler records for equipment that do not carry a matching stencil mark.



Add Equipment Records to Umler

Users add equipment records to Umler through one of the following methods;

- Add equipment is added from scratch
- Clone Equipment is copied from an existing record. Any actual differences are recorded before submitting to Umler.
- Restencil Creates a new equipment record for the new equipment id with a link to prior equipment id. Records share the same EIN.



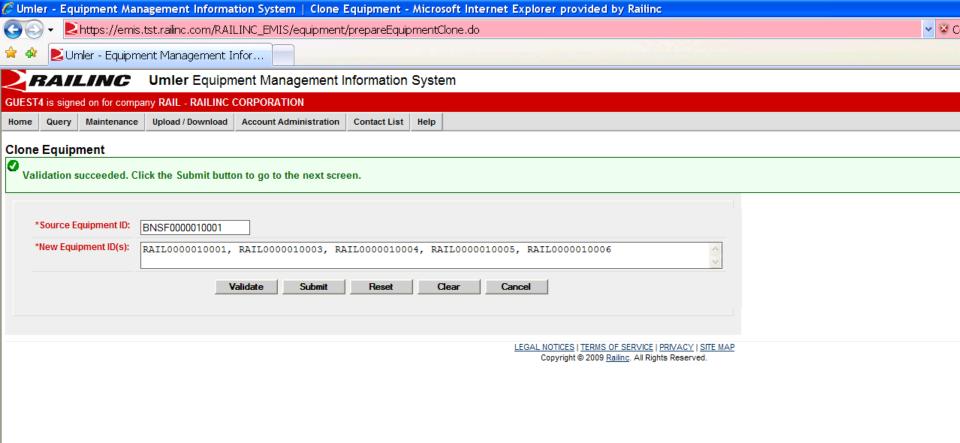
Add/Clone Equipment Records

The Add/Clone web demo provides an overview of how to add equipment from scratch and how to copy a record to create a new equipment record.

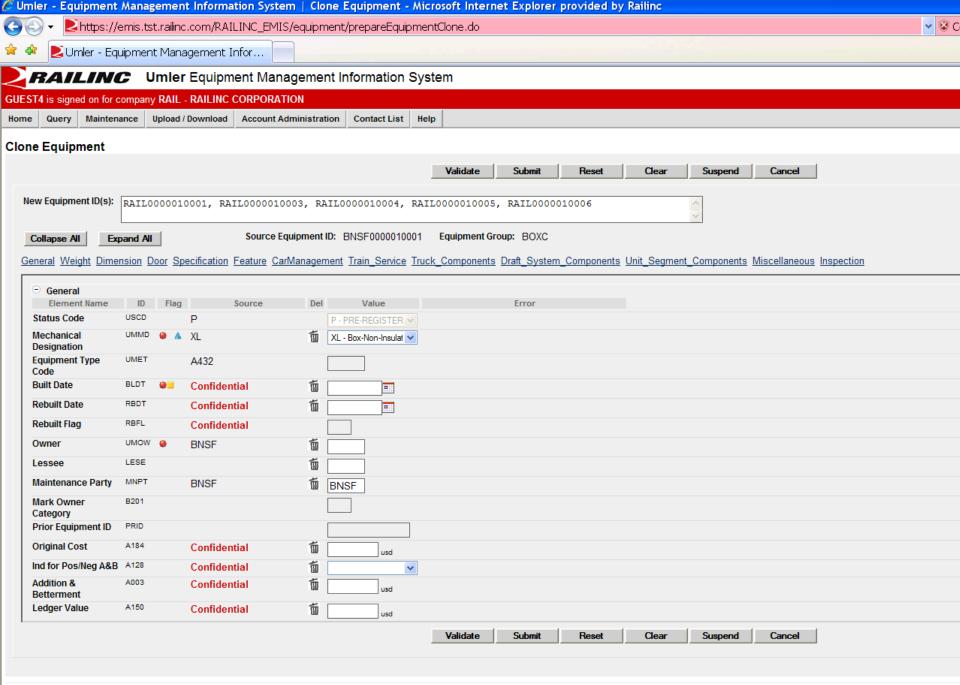
The User Guide and specification manual are important tools to assist user in completing this type of transaction.

Requires the 'Add Equipment' right









Add/Clone Equipment Records

When adding equipment records, there are certain data types to consider;

- Mandatory data
- Data used in Rating
- System Generated Elements
- Data used to generate ETC Codes
- Confidential Data



Mandatory Data

Axle Count

Axle Spacing Distance

Brake Shoe Type

Built Date

Coupler Style

Draft Gear Type

Gross Rail Load/Gross Weight

Journal Size

Load Limit

Mechanical Designation

Outside Extreme Height

Outside Extreme Width

Outside Height Extreme

Width Outside Length

Plate Code

Status Code

Tare Weight

Umler Owner

Weighing Status

Wheel Bearing Type



Mandatory Data

RAILINC Umler Equipment Management Information System											
RTSOLIS is signed on for company AARE - RAILINC Umler Test Company											
Home Query Maintenance Upload / Download				Railinc Admin Functions		ration	Contact List	Help			
Add E	quipme	ent									
			Vali	Validate Submit Reset			Clear	Sue	1		
	Validate Submit Reset Clear Suspend Cancel									J	
	*Equipment ID (s):										
С	ollapse Al	Expand A	NII		Equipment G	roup: BOX	C Number of Eq	uipmen	t Units: 1		
		ght Dimension t_Components				anagement	Train_Service Truc	ck_Com	ponents <u>Draft</u>	Syster	n_Components
Э	General										
		ement Name	ID	Flag	Val	ue		Eı	rror		
S	tatus Cod	e	USCD	•	P - PRE-REGIST	TERED 1	*				
N	lechanica	l Designation	UMMD	⊕ ∆		•					
E	quipment	Type Code	UMET								
E	Built Date		BLDT	9							
R	lebuilt Dat	е	RBDT								
R	lebuilt Flag	1	RBFL								
C	wner		UMOW	•							



Mandatory Data

Built Date Mandatory

The date the construction of the equipment is complete. For tanks, this is the date of the underframe

Data is Confidential. Used for Transportation Codes. Affects Rating. Value does not carry forward for SingleClone MultiClone.

BLDT

Valid Range of Date Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rules for BLDT-Built date must be within the last 99 years For connected unit cars report the oldest car in the set. Data is confidential for private cars



System Generated Data

Conflict Status

Date of Next Conflict Status

Date of Original Conflict Status

EIN (Equipment Identification Number)

EIN Duplication Flag

Equipment Add Date

Equipment Add Reporter Company

Equipment Type Code

First Movement Date

Inspection Due Date

Last Update Date

Rate Indicator

Rebuilt Flag Status

Change Date Status

Change Reason

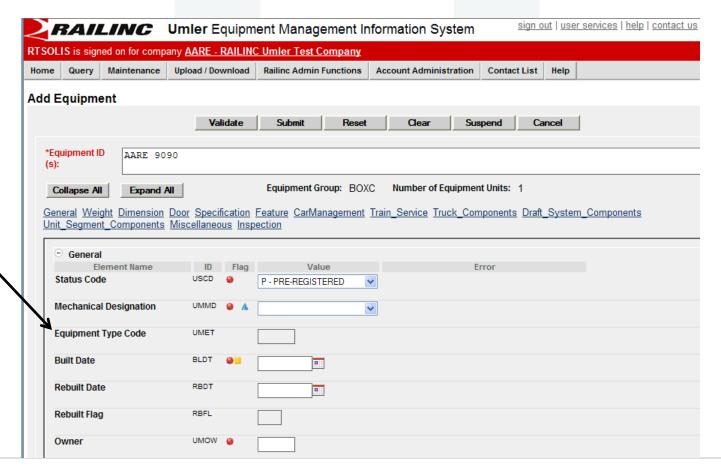
Stencil Mark Owner Category/Class

Umler Transportation Code

Umler Transportation Condition Code



System Generated Data





System Generated Data

Status Change Reason

USCR

Identifies the reason for the current operational state

System Generated Field. This element is not eligible for Input. Does not Carry Forward.

Permissible Values for USCR

- Initial Load
- M Movement
- O Status Changed Manually
- R Restencil

If movement is detected on equipment, status is changed to Active.

If an equipment record is changed to Active, any prior equipment record is placed in Inactive status.



Data used in Rating

Axle Count

Axles Spacing Distance

Built Date

Connected Unit

Count Coupler Style

Draft Gear Type

Gross Rail Load/Gross Weight

Inches of Travel

Journal Size

Outside Extreme Height

Outside Extreme Width

Outside Length

Plate Code

Stability Device Equipped

Star Code

Tare Weight

Truck Center Length

Wheel Bearing Type



Data used in Rating

	3Δ 11	INC	Umler Equi	pment Manag	gement Inf	ormation Svs	stem	sign o	out use	er services help con
_						ormanom cy	-			
				LINC Umler Test						
Home	Query	Maintenance	Upload / Downlo	pad Railinc Admir	n Functions	Account Administ	tration	Contact List	Help	
Add E	quipme	ent								
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Co	ollapse Al	Expand /	All	Equipment (Group: BOXC	Number of Eq	quipmen	t Units: 1		
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<u>Unit</u>	Segmen	t Components	Miscellaneous	<u>Inspection</u>						
9	General									
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R	ebuilt Flag	ı	RBFL							
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Data used in Rating

Built Date Mandatory

BLDT

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Valid Range of Date Values for BLDT

Minimum	Maximum
1/1/1900	12/31/9999

Validation Rules for BLDT-Built date must be within the last 99 years For connected unit cars report the oldest car in the set. Data is confidential for private cars



Data used in ETC Generation

Connected Unit Count

Coupler Style

Cubic Feet Capacity

Draft Gear Type

Inches of Travel

Inside Length/Inside Platform Length

Inside Width/Inside Platform Width

Light Density

Load Limit

Mechanical Designation

Outside Extreme Height

Outside Extreme Width

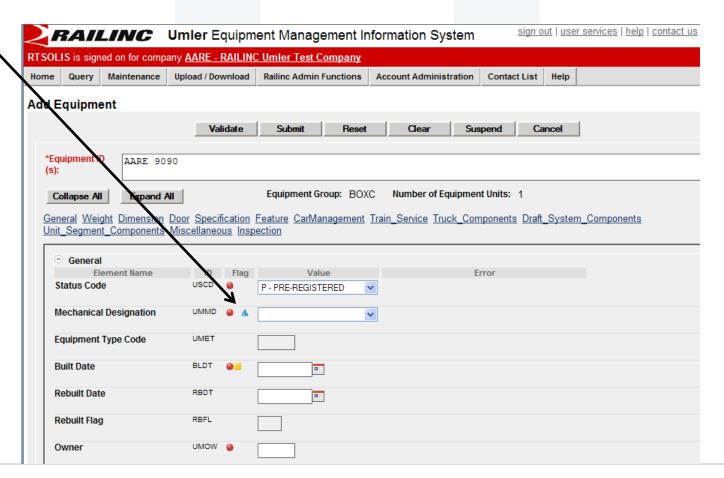
Outside Length

Platform Height Above Rail

Undercarriage Width



Data used in ETC generation





Data used in ETC Generation

Inside Length/Inside Platform Length Mandatory

A135

The length of the equipment inside walls - or - inside platform length



Used in ETC Generation. Online this field is abbreviated as 'Inside Length'. Displayed in Ft and inches. Stored in inches. Use Total Inches in Equipment Queries and CSV upload.

Valid Range of Numeric Values for A135

Minimum	Maximum
25 ft 0 inches	93 ft 11 inches

Validation Rules for A135

- -Inside Length/Inside Platform Length must be less than or equal to Outside Length
- -No Inside Length/Inside Platform Length for Trailer/Container Bulk Hopper, Tank or Flat (Mechanical Designation of UH, UTK, ZBH or ZTK)

For connected unit cars report the shortest dimension of a unit in the set.



Confidential Data

Addition & Betterment

Autorack Score

Built Date

Ledger Value

Original Certificate of Construction No.

Original Cost

Rebuilt Date

Rebuilt Flag

Superstructure Addition & Betterment

Superstructure Built Date

Superstructure Original Cost

Superstructure Rebuilt Date



Confidential Data

General Weight Dimension Door Specification Feature CarManagement Train Service Truck Components Draft System Components Unit Segment Components Miscellaneous Inspection General **Element Name** Value Conflict USCD Status Code A - ACTIVE UMMD @ Mechanical Designation XP - Box-Non-Insulated. Specially Equipped for Specific Commodities Equipment Type Code UMET A402 **Built Date** BLDT 03/01/1964 RBDT Rebuilt Date 03/01/1979 Rebuilt Flag RBFL Υ Owner UMOW @ **BNSF** LESE Lessee Maintenance Party MNPT **BNSF** B201 Mark Owner Category U Prior Equipment ID PRID **Original Cost** A184 Confidential usd A128 Ind for Pos/Neg A&B Confidential Addition & Betterment A003 Confidential Ledger Value A150 Confidential usd B122 Last Update Date 02/22/2009 **Equipment Add Date** B082 01/01/1900 USCR Status Change Reason M - Movement Status Change Date USCT 05/21/2008



Confidential Data

Built Date Mandatory

BLDT

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Valid Range of Date Values for BLDT

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Validation Rules for BLDT-Built date must be within the last 99 years For connected unit cars report the oldest car in the set.

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Modify Equipment

The Modify Equipment webdemo provides an overview of making changes to equipment.

- Report changes to physical asset that you need to communicate
- Correct equipment errors or omissions

Requires the 'Modify Equipment' right

The Data Specification manual is designed to assist with specific data element changes



Restencil Equipment

The Restencil equipment demo provides an overview of recording the restencil of a physical asset in the Umler system.

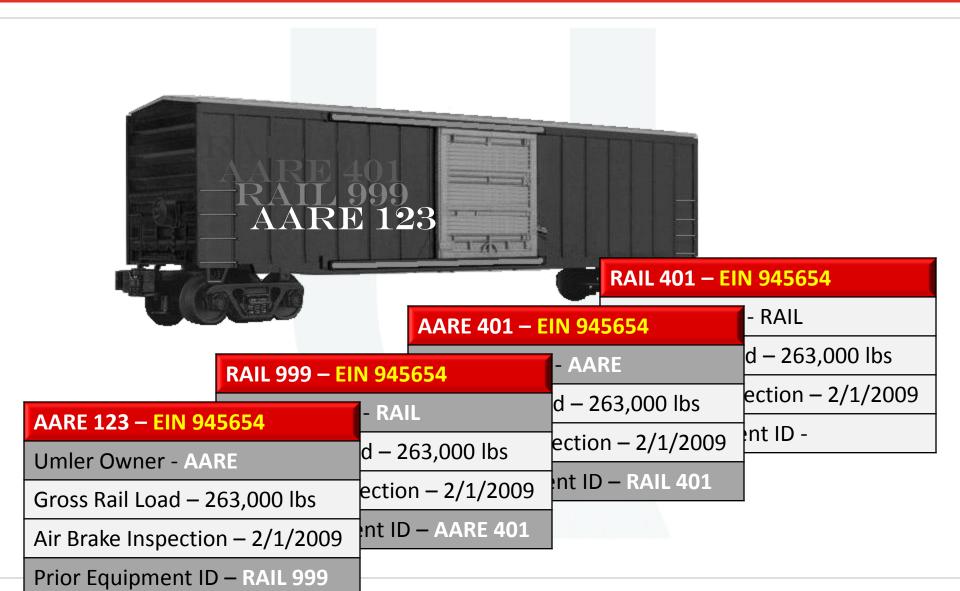


Restencil Equipment

The new Umler system provides restencil capabilities that record equipment changes over time even through ownership changes.

The EIN, or Equipment Identification Number, links equipment records together. This enables inspections and other equipment information to be maintained over time.







Confidential Data is the key to Restencil

As the default, confidential data is only viewable by the Umler Owner and the Stencil Mark Owner

In order to complete restencil, the owner could share confidential data via phone or email

-or-

For large restencil transactions or to automate restencil transactions, provide the receiving mark with the 'View Confidential Data' right.

















JOE 123 – EIN 945654 Built Date – 2/9/2005 Status - Active Air Brake Inspection – 2/1/2009 Prior Equipment ID –









JOE 123 – EIN 945654

Built Date – 2/9/2005

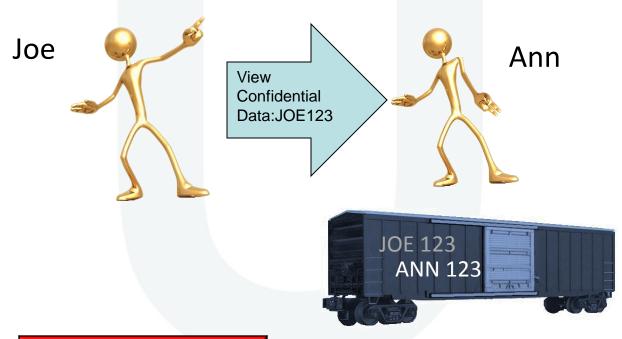
Status - Active

Air Brake Inspection – 2/1/2009

Prior Equipment ID –

Confidential





JOE 123 – EIN 945654

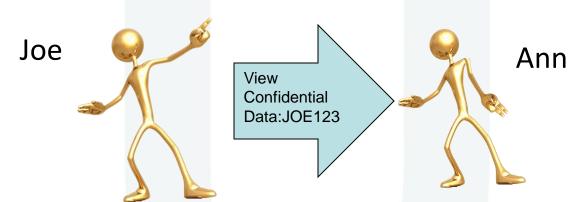
Built Date – 2/9/2005

Status - Active

Air Brake Inspection – 2/1/2009

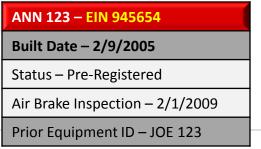
Prior Equipment ID –







JOE 123 – EIN 945654				
Built Date – 2/9/2005				
Status - Active				
Air Brake Inspection – 2/1/2009				
Prior Equipment ID –				



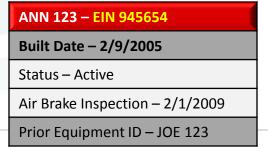








JOE 123 – EIN 945654 Built Date – 2/9/2005 Status – In-Active Air Brake Inspection – 2/1/2009 Prior Equipment ID –





Query Equipment

Railinc provides many query options for users of the Umler system;

- Inspection History
- Equipment Query
- Historical Lineage Query
- Transaction Log
- Notice Management



Inspection History Query

Enables users to answer questions;

What equipment in my fleet has inspections due in the next 90 days?

What is the history of inspections on a particular equipment id?

What inspections have been completed in the last 30 days?



Equipment Query

Umler maintains over 500 data elements for equipment in the Umler database.

Each data element increases communications between equipment owners, railroads, and shops to improve safety or operations.

Users can query all registered equipment in the North American fleet

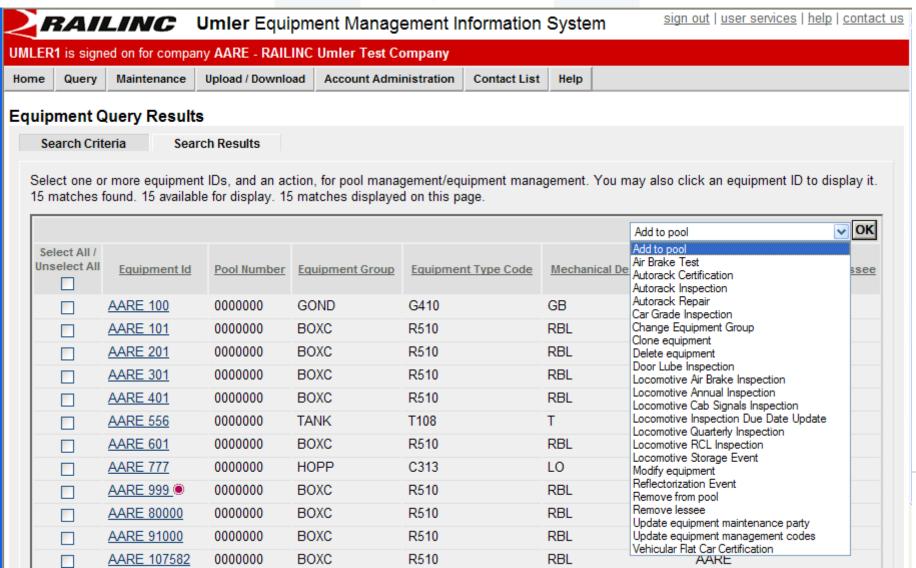


Equipment Query

- Users can query all registered equipment in the North American fleet
- Comprehensive equipment data provides a central resource for your company to communicate equipment information
- Comprehensive equipment data increases the chance that equipment characteristics will stand out for a shippers needs.



Equipment Query as a Launch Pad



Historical Lineage Query

Users can identify all equipment with a shared EIN.

Users can look back at previous ownership to view ETC codes, effective and discontinue dates, and originating transactions (Clone, Add, Restencil).



Transaction Log Query

Users can review every change made to an equipment record.

- When was data changed?
- Who changed the data?
- What was the value previous to change?

Users can now audit and report on updates to data elements.



Notice Management Query

Review all notices provided to system users

- Informational messages
- Warnings
- Errors

Review problems that users are encountering when entering information. Identify why data changes were not made.

More information in Webinar #3



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Additional Training Resources

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