File name: Prairie\_Veg\_VCa03.dm1

Model name: Physical

Platform: Microsoft Access

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List of data tables in the data model:

tbl\_Analysis\_Notes Sample location-specific comments related to data analysis

tbl\_Edit\_Log Edit log for changes made to data after certification

tbl\_Events Data collection event for a given location

tbl\_GPS\_Info GPS information associated with sampling event coordinates

tbl\_Images Images associated with sampling events

tbl\_Locations Sample locations - places where data collection occurs

tbl\_Observers Observers for each sampling event

tbl\_Phenology\_Obs Phenological stage of key taxa observed along a transect

tbl\_QA\_Results Quality assurance query results for the working data set

tbl\_Schedule Schedule for monitoring locations

tbl\_Target\_Coords Target coordinates for sample locations

tbl\_Task\_List Checklist of tasks to be completed at sampling locations

tbl\_Transect\_Obs Transect segment observation data

**tbl\_Analysis\_Notes** - Sample location-specific comments related to data analysis

*Index Index columns*

Location\_ID Location\_ID

pk\_tbl\_Analysis\_Notes (primary) Location\_ID, Analysis\_year

*Field name Index/key Data type Description*

Location\_ID primary (FK)\* text (50) Sampling location

Analysis\_year primary \* text (4) Analysis year (e.g., 2010)

Analysis\_notes memo Comments about this sample location related to the specified analysis year

**tbl\_Edit\_Log** - Edit log for changes made to data after certification

*Index Index columns*

Edit\_date Edit\_date

Edit\_type Edit\_type

pk\_tbl\_Edit\_Log (primary) Data\_edit\_ID

Project\_code Project\_code

Table\_affected Table\_affected

User\_name User\_name

*Field name Index/key Data type Description*

Data\_edit\_ID primary \* text (50) Unique identifier for each data edit record

*Default*: =Format(Now(),"yyyymmddhhnnss") & '-' & 1000000000\*Rnd(Now())

Project\_code indexed \* text (10) Project code, for linking information with other data sets and applications

Edit\_date indexed \* datetime Date on which the edits took place

*Default*: Now()

Edit\_reason \* text (100) Brief description of the reason for edits

User\_name indexed \* text (50) Name of the person making data edits

Table\_affected indexed text (50) Table affected by edits

Fields\_affected text (200) Description of the fields affected

Records\_affected text (200) Description of the records affected

Data\_edit\_notes memo Comments about the data edits

Edit\_type indexed (FK)\* text (12) Type of edits made: deletion, update, append, reformat, tbl design

**tbl\_Events** - Data collection event for a given location

*Index Index columns*

Certified\_date Certified\_date

Entered\_date Entered\_date

Location\_ID Location\_ID

pk\_tbl\_Events (primary) Event\_ID

Start\_date Start\_date

udx\_tbl\_Events (unique) Location\_ID, Start\_date

Updated\_date Updated\_date

Verified\_date Verified\_date

*Field name Index/key Data type Description*

Event\_ID primary \* text (50) Unique identifier for each sampling event

*Default*: =Format(Now(),"yyyymmddhhnnss") & '-' & 1000000000\*Rnd(Now())

Location\_ID unique (FK)\* text (50) Sampling location for this event

Project\_code \* text (10) Project code, for linking information with other data sets and applications

*Default*: "VCa03"

Start\_date unique \* datetime Start date of the sampling event

Start\_time datetime Start time of the sampling event

End\_date datetime End date of the sampling event (optional)

End\_time datetime End time of the sampling event (optional)

Declination text (25) Declination correction factor for measurement of compass bearings

Transect\_easting int Transect easting value derived in the field

GPS\_file\_name text (75) GPS rover file used for data downloads

Event\_notes memo Comments about the sampling event

Entered\_by text (50) Person who entered the data for this event

Entered\_date indexed datetime Date on which data entry occurred

*Default*: Now()

Updated\_by text (50) Person who made the most recent updates

Updated\_date indexed datetime Date of the most recent edits

Verified\_by text (50) Person who verified accurate data transcription

Verified\_date indexed datetime Date on which data were verified

Certified\_by text (50) Person who certified data for accuracy and completeness

Certified\_date indexed datetime Date on which data were certified

Is\_excluded bit Flag to exclude the sampling event from data summary output

*Default*: False

QA\_notes memo Quality assurance comments for the selected sampling event

Hours\_spent single Number of hours spent setting up and collecting data

*Constraint*: Is Null Or (>=0 And <=50)

N\_quadrats tinyint Number of quadrats sampled during the event

*Constraint*: Is Null Or (>=0 And <=50)

Transect\_northing int Transect northing value derived in the field

Transect\_notes memo Sampling event comments specific to transect sampling

Quadrat\_notes memo Sampling event comments specific to quadrat sampling

**tbl\_GPS\_Info** - GPS information associated with sampling event coordinates

*Index Index columns*

Corr\_type Corr\_type

Datum GPS\_datum

Feat\_name Feat\_name

Feat\_type Feat\_type

GPS\_date GPS\_date

GPS\_file GPS\_file

Location\_ID Location\_ID

pk\_tbl\_GPS\_Info (primary) GPS\_ID

Corr\_type1 Receiver\_type

Segment\_num Segment

Transect\_obs\_ID Transect\_obs\_ID

*Field name Index/key Data type Description*

GPS\_ID primary \* text (50) Unique identifier for the GPS record

*Default*: =Format(Now(),"yyyymmddhhnnss") & '-' & 1000000000\*Rnd(Now())

Feat\_name indexed text (50) Feature name in data dictionary

Flag \* bit Internal flag used to identify records while matching with tbl\_Coordinates during post-season processing

*Default*: False

GPS\_file indexed text (50) GPS file name

GPS\_date indexed datetime Date GPS file was collected

GPS\_time datetime Time GPS file was collected

Corr\_type indexed text (50) GPS file correction type

GPS\_UTME double UTM easting in GPS unit

GPS\_UTMN double UTM northing in GPS unit

UTM\_zone text (5) UTM projection system zone

*Default*: "10N"

GPS\_datum indexed text (5) Datum of GPS coordinates

Feat\_type indexed text (20) Feature type (point, line, or polygon) collected with GPS

Data\_dict\_name text (50) Data dictionary name used to collect feature

Elev\_m double Elevation (meters) in GPS unit

Num\_sat smallint Number of satellites tracked by GPS unit during data collection

GPS\_duration text (25) Length of time GPS file was open

Filt\_pos smallint Number of GPS positions exported from GPS file

PDOP double Position dilution of precision scale

HDOP double Horizontal dilution of precision scale

H\_err\_m double Horizontal error (meters)

V\_err\_m double Vertical error (meters)

Std\_dev\_m double Standard deviation (meters)

GPS\_process\_notes text (255) GPS file processing notes

Is\_better \* bit Indicates that the field crew thought this coordinate record to be an improvement over the current Is\_best coordinate

*Default*: False

Location\_ID indexed (FK) text (50) Sample location, filled in once a match is made on feature name

Transect\_obs\_ID indexed (FK) int Transect observation identifier, filled in once a match is made on location, segment and year

Segment indexed \* smallint Segment number assigned in the field for linking GPS records with data sheet records

Receiver\_type indexed text (50) GPS receiver type (optional)

**tbl\_Images** - Images associated with sampling events

*Index Index columns*

Event\_ID Event\_ID

Image\_label Image\_label

Image\_quality Image\_quality

Image\_type Image\_type

pk\_tbl\_Images (primary) Image\_ID

*Field name Index/key Data type Description*

Image\_ID primary \* int Unique identifier for each image record

Event\_ID indexed (FK)\* text (50) Sampling event

Image\_label indexed text (25) Image caption or label

Image\_desc text (255) Brief description of the image bearing, perspective, etc.

Frame\_number text (10) Frame number for photographic images

Image\_date datetime Date on which the image was created, if different from the sampling event date

Image\_source text (50) Name of the person or organization that created the image

Orig\_format text (20) Format of the original image

Image\_edit\_notes text (200) Comments about the editing or processing performed on the image

Image\_filename text (100) Name of the image including extension (.jpg) but without the image path

Image\_notes memo Comments about the image

Image\_type indexed (FK) text (12) Type of image

*Default*: "Ground photo"

Image\_quality indexed (FK) tinyint Quality of the image

Object\_format (FK) text (12) Format of the image

Image\_path text (255) Path for the image file

Active\_tf bit Indicates whether the image is still being used for navigation or interpretation

*Default*: True

**tbl\_Locations** - Sample locations - places where data collection occurs

*Index Index columns*

Firing\_order Firing\_order

Loc\_updated Loc\_updated

Location\_code Location\_code

Location\_status Location\_status

Location\_type Location\_type

Panel\_name Panel\_name

Panel\_type Panel\_type

Park\_code Park\_code

pk\_tbl\_Locations (primary) Location\_ID

Public\_offset Public\_offset

udx\_tbl\_Locations (unique) Location\_code, Unit\_code

Unit\_code Unit\_code

*Field name Index/key Data type Description*

UTMN\_public double UTM northing (zone 10N, meters). Note: in addition to any measurement error, these coordinates may have been offset up to 2 km from their actual position.

Public\_offset indexed text (50) Type of processing performed to make coordinates publishable

Travel\_notes memo Directions for relocating the sample location

Location\_desc memo Environmental description of the sampling location

Location\_notes memo Other notes about the sample location

Loc\_established datetime Date the sample location was established

Loc\_discontinued datetime Date the sample location was discontinued

Loc\_created\_date datetime Time stamp for record creation

*Default*: Now()

Loc\_updated indexed datetime Date of the last update to this record

Loc\_updated\_by text (50) Person who made the most recent edits

Location\_ID primary \* text (50) Unique identifier for each sample location

*Default*: =Format(Now(),"yyyymmddhhnnss") & '-' & 1000000000\*Rnd(Now())

Location\_code unique \* text (10) Alphanumeric code for the sample location

Location\_name text (50) Brief colloquial name of the sample location (optional)

Panel\_name indexed \* text (10) Name of the sampling panel, used to group data for analysis

Firing\_order indexed int Site selection and evaluation order

UTME\_public double UTM easting (zone 10N, meters). Note: in addition to any measurement error, these coordinates may have been offset up to 2 km from their actual position.

Unit\_code unique \* text (2) Unit in which the sample location is located: AC (American Camp) or EC (English Camp)

Park\_code indexed (FK)\* text (4) Park in which the sample location is located

Location\_type indexed (FK)\* text (20) Indicates the type of sample location

Location\_status indexed (FK)\* text (10) Status of the sample location

*Default*: "Active"

Panel\_type indexed (FK) text (20) Sampling panel for the site

**tbl\_Observers** - Observers for each sampling event

*Index Index columns*

Contact\_ID Contact\_ID

Event\_ID Event\_ID

Observer\_role Observer\_role

pk\_tbl\_Observers (primary) Event\_ID, Contact\_ID, Observer\_role

*Field name Index/key Data type Description*

Event\_ID primary (FK)\* text (50) Sampling event identifier

Contact\_ID primary (FK)\* text (50) Observer identifier

Observer\_notes text (200) Comments about the observer specific to this sampling event

Observer\_role primary (FK)\* text (25) Role of the observer during data collection

**tbl\_Phenology\_Obs** - Phenological stage of key taxa observed along a transect

*Index Index columns*

Event\_ID Event\_ID

Stage Stage\_code

Taxon\_ID Species\_code

pk\_tbl\_Phenology\_Data (primary) Event\_ID, Species\_code, Stage\_code

*Field name Index/key Data type Description*

Event\_ID primary (FK)\* text (50) Sampling event

Species\_code primary (FK)\* text (10) Phenology species observed

Stage\_code primary (FK)\* text (2) Phenological stage observed

Avg\_height\_m single Average height of the species

Phenology\_notes text (50) Comments about the phenology stage observation

Sort\_num \* int Sort order for data entry

**tbl\_QA\_Results** - Quality assurance query results for the working data set

*Index Index columns*

Data\_scope Data\_scope

pk\_tbl\_QA\_Results (primary) Query\_name, Time\_frame, Data\_scope

Query\_name Query\_name

Query\_result Query\_result

Query\_type Query\_type

Time\_frame Time\_frame

*Field name Index/key Data type Description*

Query\_name primary \* text (100) Name of the quality assurance query

Data\_scope primary \* tinyint Scope of the data included in queries: 0=Uncertified events only, 1=Both certified and uncertified, 2=Certified events only

Time\_frame primary \* text (30) Field season year or range of dates for the data being passed through quality assurance checks

Query\_type indexed text (20) Severity of data errors being trapped: 1=Critical, 2=Warning, 3=Information

Query\_result indexed text (50) Query result as the number of records returned the last time the query was run

Query\_run\_time datetime Run time of the query results

Query\_description memo Description of the query

Query\_expression memo Evaluation expression built into the query

Remedy\_desc memo Details about actions taken and/or not taken to resolve errors

Remedy\_date datetime When the remedy description was last edited

QA\_user text (50) Name of the person doing quality assurance

Is\_done \* bit Temporary flag to indicate that the user is done reviewing this query even if some records remain

**tbl\_Schedule** - Schedule for monitoring locations

*Index Index columns*

Calendar\_year Calendar\_year

Location\_ID Location\_ID

pk\_tbl\_Schedule (primary) Calendar\_year, Location\_ID

*Field name Index/key Data type Description*

Calendar\_year primary \* text (10) Calendar year for scheduled sampling (not necessarily actually sampled)

Location\_ID primary (FK)\* text (50) Monitoring location

Schedule\_notes text (255) Comments about year-location record (especially for out-of-rotation sites)

**tbl\_Target\_Coords** - Target coordinates for sample locations

*Index Index columns*

Location\_ID Location\_ID

pk\_tbl\_Target\_Coords (primary) Location\_ID, Target\_type

Target\_type Target\_type

Target\_updated Target\_updated

*Field name Index/key Data type Description*

Location\_ID primary (FK)\* text (50) Sample location

Target\_type primary \* text (10) Type of target (e.g., start or end point)

Target\_UTME double Target UTM easting (zone 10N)

Target\_UTMN double Target UTM northing (zone 10N)

Target\_notes memo Notes about the target coordinates

Target\_created\_date datetime Time stamp for record creation

*Default*: Now()

Target\_updated indexed datetime Date of the last update to this record

Target\_updated\_by text (50) Person who made the most recent edits

Target\_datum (FK) text (5) Target coordinate datum

*Default*: "NAD83"

**tbl\_Task\_List** - Checklist of tasks to be completed at sampling locations

*Index Index columns*

Date\_completed Date\_completed

pk\_tbl\_Task\_List (primary) Location\_ID, Request\_date, Task\_desc

Task\_status Task\_status

*Field name Index/key Data type Description*

Location\_ID primary (FK)\* text (50) Sampling location

Request\_date primary \* datetime Date of the task request

*Default*: Now()

Task\_desc primary \* text (100) Brief description of the task

Requested\_by text (50) Name of the person making the initial request

Task\_status indexed \* text (50) Status of the task

*Default*: "Active"

Date\_completed indexed datetime Date the task was completed

Followup\_by text (50) Name of the person following up on or completing the task

Task\_notes memo Notes about the task

Followup\_notes memo Comments regarding what was done to follow-up on or complete this task

**tbl\_Transect\_Obs** - Transect segment observation data

*Index Index columns*

Cover\_class Cover\_class

Event\_ID Event\_ID

Origin Origin

pk\_tbl\_Transect\_Obs (primary) Observation\_ID

Segment\_num Segment\_num

Substrate Substrate

Veg\_type Veg\_type

udx\_Event\_Segment (unique) Event\_ID, Segment\_num

*Field name Index/key Data type Description*

Observation\_ID primary \* int Unique identifier for each observation record (also the sort order for data entry)

Event\_ID unique (FK)\* text (50) Sampling event identifier

Segment\_num unique \* smallint Sequential number assigned in the field for linking GPS records with data sheet records; segments added or merged later may be out of sequence

Segment\_length\_m single Calculated length of the veg type segment, calculated after certification using the difference in northing (AC) or easting (EC) values along the transect

No\_GPS \* bit Flag to indicate that no GPS position was recorded for the current segment record

*Default*: False

UTME double Final UTM easting (zone 10N, meters) usually derived from corrected GPS coordinates or, if none, from field values; may be snapped to the start/end of the transect

UTMN double Final UTM northing (zone 10N, meters) usually derived from corrected GPS coordinates or, if none, from field values; may be snapped to the start/end of the transect

Is\_grazed smallint Flag to indicate that the transect segment was grazed

*Constraint*: Is Null Or 0 Or -1

Obs\_notes text (100) Comments about this observation made during the field event

Flag \* tinyint Internal flag used to identify records with potential sequence errors (either 0=no problem, 1=flagged and unresolved, or 2=reviewed)

*Default*: 0

Office\_notes text (150) Record processing notes

Field\_coord int Field easting or northing value denoting the westernmost (for EC transects) or southernmost boundary (for AC transects) of the segment; often estimated in the field or taken from the GPS screen

Veg\_type indexed (FK)\* text (10) Vegetation type of the transect segment

Origin indexed (FK)\* text (10) Category to indicate whether native or exotic species predominate ('NA' for unvegetated types)

Cover\_class indexed (FK)\* text (10) Vegetative cover for the herbaceous segments: recorded for exotic species where Origin=N, and for native species cover where Origin=E

Substrate indexed (FK) text (10) Predominant substrate of the transect segment

**tlu\_Cover\_Class** - List of cover classes

*Field name Index/key Data type Description*

Cover\_class primary \* text (10)

Class\_desc \* text (100)

Sort\_order tinyint

**tlu\_Datum** - List of coordinate datum codes (standard)

*Field name Index/key Data type Description*

Datum primary \* text (5)

Datum\_desc \* text (50)

Sort\_order tinyint

**tlu\_Edit\_Type** - List of the types of post-certification edits made to data (standard)

*Field name Index/key Data type Description*

Edit\_type primary \* text (12)

Edit\_type\_desc \* text (100)

Sort\_order tinyint

**tlu\_GPS\_Model** - List of GPS devices used to collect coordinate data (template)

*Field name Index/key Data type Description*

GPS\_model primary \* text (25)

Sort\_order tinyint

**tlu\_Image\_Format** - List of image, map, and photographic formats (template)

*Field name Index/key Data type Description*

Image\_format primary \* text (12)

Image\_format\_desc \* text (100)

Sort\_order tinyint

**tlu\_Image\_Quality** - List of quality ranks for images (template)

*Index Index columns*

pk\_tlu\_Image\_Quality (primary) Quality\_code

Image\_quality (unique) Image\_quality

*Field name Index/key Data type Description*

Quality\_code primary \* tinyint

Image\_quality unique \* text (20)

Image\_quality\_desc text (100)

**tlu\_Image\_Type** - List of image types (template)

*Field name Index/key Data type Description*

Image\_type primary \* text (12)

Image\_type\_desc \* text (100)

Sort\_order tinyint

**tlu\_Location\_Type** - List of location type codes (template)

*Field name Index/key Data type Description*

Location\_type primary \* text (20)

Loc\_type\_desc \* text (200)

Sort\_order tinyint

**tlu\_Observer\_Role** - List of observer role assignments (template)

*Field name Index/key Data type Description*

Observer\_role primary \* text (25)

Role\_desc \* text (100)

Sort\_order tinyint

**tlu\_Origin\_Code** - List of vegetation origin codes

*Field name Index/key Data type Description*

Origin\_code primary \* text (10)

Origin\_desc \* text (100)

Sort\_order tinyint

**tlu\_Panel\_Type** - List of sampling panel types (template)

*Field name Index/key Data type Description*

Panel\_type primary \* text (20)

Panel\_type\_desc text (200)

Sort\_order tinyint

**tlu\_Parks** - List of NCCN parks and park codes (standard)

*Field name Index/key Data type Description*

Park\_code primary \* text (4)

Park\_name text (50)

**tlu\_Phenology\_Species** - List of species used to measure phenology at the time of sampling

*Index Index columns*

Scientific\_name (unique) Scientific\_name

pk\_tlu\_Phenology\_Species (primary) Species\_code

*Field name Index/key Data type Description*

Species\_code primary \* text (10)

Scientific\_name unique \* text (100)

Sort\_order tinyint

**tlu\_Project\_Crew** - List of personnel associated with a project (template)

*Index Index columns*

Contact\_location Contact\_location

Contact\_updated Contact\_updated

First\_name First\_name

Last\_name Last\_name

Organization Organization

pk\_tlu\_Project\_Crew (primary) Contact\_ID

Project\_code Project\_code

*Field name Index/key Data type Description*

Contact\_ID primary \* text (50) Unique identifier for the individual (Lastname\_Firstname\_MI)

Contact\_is\_active bit Indicates that the contact record is currently available for data entry pick lists

*Default*: True

Project\_code indexed \* text (10) Project code, for linking information with other data sets and applications

Last\_name indexed \* text (24) Last name

First\_name indexed text (20) First name

Middle\_init text (4) Middle initials

Organization indexed text (50) Employer (e.g., NPS-MORA)

Position\_title text (50) Position title held by the individual

Email text (50) Email address

Work\_voice text (25) Work phone number

Work\_ext text (5) Work extension number

Mobile\_voice text (25) Mobile phone number

Home\_voice text (25) Home phone number

Fax text (25) Fax number

Contact\_location indexed text (255) Where the individual is located

Contact\_notes memo Notes about the contact

Contact\_created datetime Time stamp for record creation

*Default*: Now()

Contact\_updated indexed datetime Date of the last update to this record

Contact\_updated\_by text (50) Person who made the most recent edits

**tlu\_Record\_QA\_Status** - List of record status codes to indicate the quality assurance status of records (standard)

*Index Index columns*

Rec\_status\_label (unique) Rec\_status\_label

pk\_tlu\_Record\_QA\_Status (primary) Rec\_status\_ID

*Field name Index/key Data type Description*

Rec\_status\_ID primary \* tinyint Order in which the record status labels are shown

Rec\_status\_label unique \* text (12) Status label to indicate the quality assurance status of the record

Status\_display text (255) Abbreviated description text shown to the user via the application

Status\_desc memo Full description of the quality assurance status

Criteria text (255) Query criteria used to define the record status

**tlu\_Site\_Status** - List of status codes for sampling stations (standard)

*Field name Index/key Data type Description*

Site\_status primary \* text (10)

Site\_status\_desc \* text (200)

Sort\_order tinyint

**tlu\_Stage\_Code** - List of phenology stage codes

*Field name Index/key Data type Description*

Stage\_code primary \* text (2)

Stage\_desc \* text (100)

Sort\_order tinyint

**tlu\_Substrate** - List of cover classes

*Field name Index/key Data type Description*

Substrate\_code primary \* text (10)

Substrate\_desc \* text (100)

Sort\_order tinyint

**tlu\_Veg\_Type** - List of vegetation types

*Field name Index/key Data type Description*

Veg\_type primary \* text (10)

Veg\_desc \* text (100)

Sort\_order tinyint

**tsys\_App\_Releases** - Application table - Application release history

*Index Index columns*

pk\_tsys\_App\_Releases (primary) Release\_ID

udx\_tsys\_App\_Releases (unique) Release\_date, Database\_title, Version\_number

*Field name Index/key Data type Description*

Release\_ID primary \* text (50) Unique identifier for the release

*Default*: =Format(Now(),"yyyymmddhhnnss") & '-' & 1000000000\*Rnd(Now())

Release\_date unique \* datetime Date of the release

Database\_title unique \* text (100) Title of the database

Version\_number unique \* text (20) Version control number

File\_name text (50) Filename, used to identify older versions of the database

Release\_by text (50) Person who issued the release

Release\_notes memo Release notes, which may include a summary of revisions

Is\_supported \* tinyint Indicates the support level of this release: 0=user must use a newer version; 1=supported but newer available; 2=full support, current version

*Default*: 2

**tsys\_Bug\_Reports** - Application table - Application bugs and development history

*Index Index columns*

Fix\_date Fix\_date

pk\_tsys\_Bug\_Reports (primary) Bug\_ID

Release\_ID Release\_ID

Report\_date Report\_date

*Field name Index/key Data type Description*

Bug\_ID primary \* text (50) Unique identifier for each bug record

*Default*: =Format(Now(),"yyyymmddhhnnss") & '-' & 1000000000\*Rnd(Now())

Release\_ID indexed (FK)\* text (50) Database release version of the report

Report\_date indexed \* datetime Date the bug was reported

*Default*: =Date()

Found\_by text (50) Person who found the bug

Reported\_by text (50) Person who filled out this bug report

Report\_details memo Nature of the bug report

Fix\_date indexed datetime Date the bug was fixed

Fixed\_by text (50) Person who fixed the bug

Fix\_details memo Notes on fix

**tsys\_Logins** - Application table - Log of user access to the database through the front-end

*Field name Index/key Data type Description*

Time\_stamp primary \* datetime Time stamp of activity record

*Default*: Now()

User\_name primary \* text (50) Login name of the user

Action\_taken text (50) Action taken by the user

**tsys\_User\_Roles** - Application table - Determines user access privileges through the front-end

*Field name Index/key Data type Description*

User\_name primary \* text (50) Network login

User\_role \* text (50) Database application role, used to determine the access level