

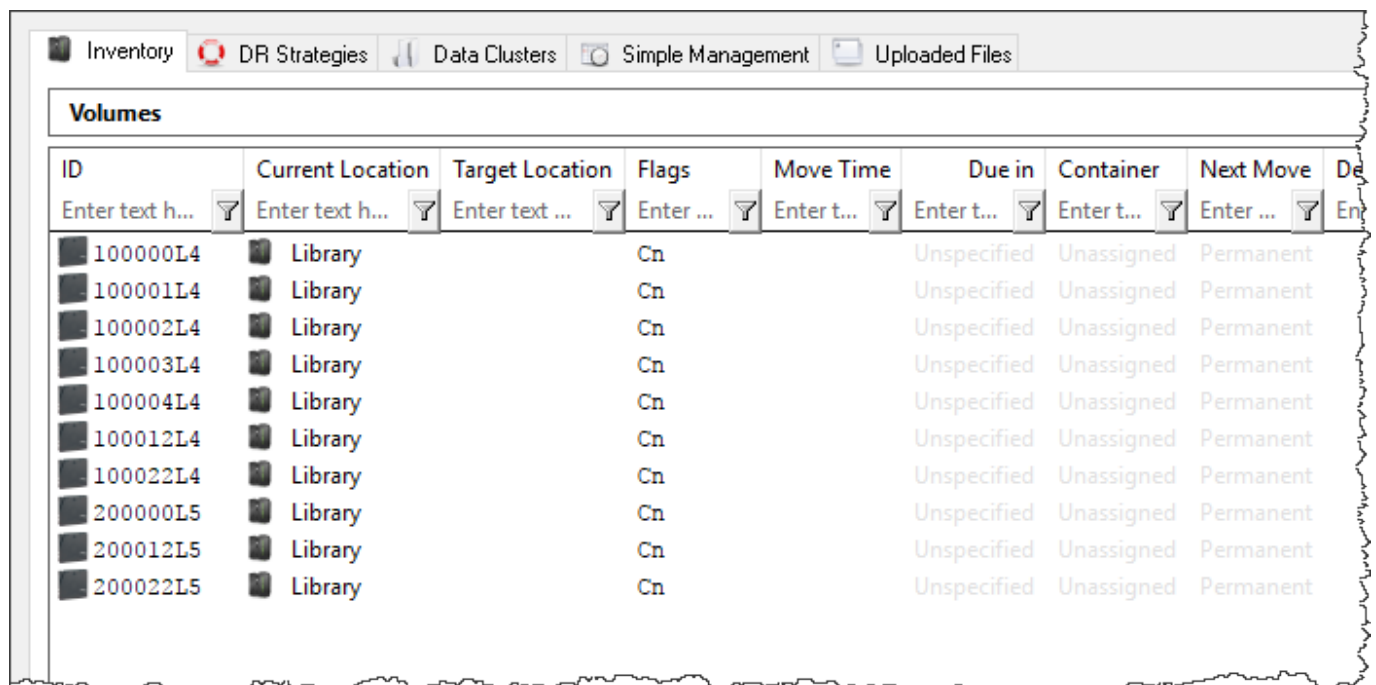
# Pattern matching

TapeTrack has powerful pattern matching functionality that can be utilized globally in [TapeTrack](#) [TapeMaster](#).

## String Pattern Matching

To illustrate the effects of where and how the asterisk wildcard affects search results all examples will be performed against the following [Volume](#) values.

100000L4, 100001L4, 100002L4, 100003L4, 100004L4, 100012L4, 100022L4, 200000L5, 200012L5, 200022L5



ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next Move	Date
100000L4	Library		Cn		Unspecified	Unassigned	Permanent	
100001L4	Library		Cn		Unspecified	Unassigned	Permanent	
100002L4	Library		Cn		Unspecified	Unassigned	Permanent	
100003L4	Library		Cn		Unspecified	Unassigned	Permanent	
100004L4	Library		Cn		Unspecified	Unassigned	Permanent	
100012L4	Library		Cn		Unspecified	Unassigned	Permanent	
100022L4	Library		Cn		Unspecified	Unassigned	Permanent	
200000L5	Library		Cn		Unspecified	Unassigned	Permanent	
200012L5	Library		Cn		Unspecified	Unassigned	Permanent	
200022L5	Library		Cn		Unspecified	Unassigned	Permanent	

## Asterisk (\*)

The **Asterisk is used** as a wildcard to allow string matching in multiple positions and variable string lengths.

- An **Asterisk** before a set of characters will show all items that end with those characters. Using the filter \*L4 in the [Volume-ID](#) field will show all [Volume-ID](#)'s ending in L4.

The screenshot shows a web interface with a navigation bar containing 'Inventory', 'DR Strategies', 'Data Clusters', 'Simple Management', and 'Uploaded Files'. Below this is a section titled 'Volumes' containing a table. The table has columns: ID, Current Location, Target Location, Flags, Move Time, Due in, Container, and Next M. The filter '\*L4' is applied to the ID column. The table displays seven rows of volume data.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next M
*L4	Enter text h...	Enter text ...	Enter ...	Enter t...	Enter t...	Enter t...	Enter
100000L4	Library		Cn		Unspecified	Unassigned	Perma
100001L4	Library		Cn		Unspecified	Unassigned	Perma
100002L4	Library		Cn		Unspecified	Unassigned	Perma
100003L4	Library		Cn		Unspecified	Unassigned	Perma
100004L4	Library		Cn		Unspecified	Unassigned	Perma
100012L4	Library		Cn		Unspecified	Unassigned	Perma
100022L4	Library		Cn		Unspecified	Unassigned	Perma

- An **Asterisk** after a set of characters will show all items that begin with those characters. Using the filter 20\* in the [Volume-ID](#) field will display all [Volume-ID's](#) starting with 20.

The screenshot shows the same web interface as above, but with the filter '20\*' applied to the ID column. The table now displays only three rows of volume data.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next M
20*	Enter text h...	Enter text ...	Enter ...	Enter t...	Enter t...	Enter t...	Enter
200000L5	Library		Cn		Unspecified	Unassigned	Perma
200012L5	Library		Cn		Unspecified	Unassigned	Perma
200022L5	Library		Cn		Unspecified	Unassigned	Perma

- If used on its own, the **Asterisk** will match everything and, as such, will have no effect on [Volumes](#) displayed.
- Using two **Asterisks**, one on either side of a character or set of characters will show all items containing that character or set of characters at any character position. Using the filter \*02\* in the [Volume-ID](#) field will display all [Volume-ID's](#) that have 02 anywhere within the ID.

The screenshot shows the same web interface as above, but with the filter '\*02\*' applied to the ID column. The table now displays three rows of volume data, including some that were not shown in the previous screenshot.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next M
*02*	Enter text h...	Enter text ...	Enter ...	Enter t...	Enter t...	Enter t...	Enter
100002L4	Library		Cn		Unspecified	Unassigned	Perma
100022L4	Library		Cn		Unspecified	Unassigned	Perma
200022L5	Library		Cn		Unspecified	Unassigned	Perma

- The Asterisk does not need to be used when entering a full Object-ID or when searching for [Flags](#) in the [Volume List](#).

The screenshot shows the 'Volumes' section of the TapeTrack interface. The top navigation bar includes 'Inventory', 'DR Strategies', 'Data Clusters', 'Simple Management', and 'Uploaded Files'. Below this, the 'Volumes' table is displayed with the following columns: ID, Current Location, Target Location, Flags, Move Time, Due in, Container, and Next Move. A single row is visible with the ID '200000L5', 'Library' as the current location, 'CEn' as the flag, and 'Unspecified' as the container. The filter '??????L5' is applied to the ID field.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next Move
200000L5	Library		CEn		Unspecified	Unassigned	Permanent

## Question Mark (?)

The **Question Mark** is used to indicate that any character can exist in a specific character position.

Using the filter `??????L4` in the **Volume-ID** field will display all eight character **Volume-ID's** ending in L4.

The screenshot shows the 'Volumes' section of the TapeTrack interface with the filter '??????L4' applied to the ID field. The table displays eight volume entries, all with 'Library' as the current location and 'Permanent' as the next move.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next Move
100000L4	Library		Cn		Unspecified	Unassigned	Permanent
100001L4	Library		CEn		Unspecified	Unassigned	Permanent
100002L4	Library		CEn		Unspecified	Unassigned	Permanent
100003L4	Library		Cn		Unspecified	Unassigned	Permanent
100004L4	Library		Cn		Unspecified	Unassigned	Permanent
100012L4	Library		Cn		Unspecified	Unassigned	Permanent
100022L4	Library		Cn		Unspecified	Unassigned	Permanent

## Square Brackets ([ ])

**Square Brackets** can be used to provide parameters for a specific character position that are longer than one character. There are four different configurations:

### Multiple Characters

When multiple characters are put in a **Square Bracket**, any of the characters listed will be displayed at the specified character position.

Using the filter, in the **Volume-ID** field, `[12]?????L[45]` will display all eight character **Volume-ID's** that start in either 1 or 2 and end in either L4 or L5.

### Range Of Characters

Using the filter, in the **Volume-ID** field, `[12]?????L[4-7]` will display all eight character **Volume-ID's** that start in either 1 or 2 and end in either L4, L5, L6 or L7.

The screenshot shows the Tapetrack interface with a navigation bar containing 'Inventory', 'DR Strategies', 'Data Clusters', 'Simple Management', and 'Uploaded Files'. Below the navigation bar is a section titled 'Volumes' containing a table. The table has columns for ID, Current Location, Target Location, Flags, Move Time, Due in, Container, Next Move, and Deleted. The filter applied to the ID column is '?????L[1-4]'. The table displays eight rows of data, all with 'Library' as the current location and 'Unassigned' as the container. The flags for the first two rows are 'Cn' and 'CEn', while the others are 'Cn'. The 'Due in' status for all is 'Unspecified' and the 'Next Move' is 'Permanent'.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next Move	De
?????L[1-4]	Enter text h...	Enter text ...	Enter ...	Enter t...	Enter t...	Enter t...	Enter ...	En
100000L4	Library		Cn		Unspecified	Unassigned	Permanent	
100001L4	Library		CEn		Unspecified	Unassigned	Permanent	
100002L4	Library		CEn		Unspecified	Unassigned	Permanent	
100003L4	Library		Cn		Unspecified	Unassigned	Permanent	
100004L4	Library		Cn		Unspecified	Unassigned	Permanent	
100012L4	Library		Cn		Unspecified	Unassigned	Permanent	
100022L4	Library		Cn		Unspecified	Unassigned	Permanent	

### Vertical Bar (|)

When two or more characters are placed between **Square Brackets** and separated by **Vertical Bars**, the **Vertical Bar** will act as the word “OR” displaying any of the characters.

Using the filter, in the **Volume-ID** field, `?????L[4|5]` will display all eight character **Volume-ID's** that end in either L4 **OR** L5.

The screenshot shows the Tapetrack interface with the same navigation bar. The 'Volumes' section shows a table with the filter '?????L[4|5]' applied to the ID column. The table displays four rows of data. The first two rows have 'Library' as the current location and 'Unassigned' as the container, with flags 'CEn'. The last two rows have 'Library' as the current location and 'Unassigned' as the container, with flags 'CEn'. The 'Due in' status for all is 'Unspecified' and the 'Next Move' is 'Permanent'.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next Move	De
?????L[4 5]	Enter text h...	Enter text ...	E	Enter t...	Enter t...	Enter t...	Enter ...	En
100001L4	Library		CEn		Unspecified	Unassigned	Permanent	
100002L4	Library		CEn		Unspecified	Unassigned	Permanent	
200000L5	Library		CEn		Unspecified	Unassigned	Permanent	
200012L5	Library		CEn		Unspecified	Unassigned	Permanent	

### Hyphen (-)

When two characters are placed between **Square Brackets** and separated by a **Hyphen**, any character alphanumerically between the two characters inclusive will display.

Using the filter, in the **Volume-ID** field, `?????L[1-4]` will display all eight character **Volume-ID's** that end in L1, L2, L3 OR L4.

The screenshot shows the TapeTrack interface with a navigation bar containing 'Inventory', 'DR Strategies', 'Data Clusters', 'Simple Management', and 'Uploaded Files'. Below this is a 'Volumes' section with a table. The table has columns: ID, Current Location, Target Location, Flags, Move Time, Due in, Container, Next Move, and Deleted. A filter is applied to the ID column with the value '?????L[1-4]'. The table displays 8 rows of volume data, all with 'Library' as the current location and 'Unspecified' as the due in status.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next Move	Deleted
?????L[1-4]	Enter text h...	Enter text ...	Enter ...	Enter t...	Enter t...	Enter t...	Enter ...	En
100000L4	Library		Cn		Unspecified	Unassigned	Permanent	
100001L4	Library		CEn		Unspecified	Unassigned	Permanent	
100002L4	Library		CEn		Unspecified	Unassigned	Permanent	
100003L4	Library		Cn		Unspecified	Unassigned	Permanent	
100004L4	Library		Cn		Unspecified	Unassigned	Permanent	
100012L4	Library		Cn		Unspecified	Unassigned	Permanent	
100022L4	Library		Cn		Unspecified	Unassigned	Permanent	

### Exclamation Point (!)

When the **Exclamation Point** is placed immediately following the left **Square Bracket** in a set of **Square Brackets**, any character except for the characters listed after the **Exclamation Point** will display. This functionality also works with **Multiple Characters**, **Vertical Bars**, and **Hyphens**.

Using the filter, in the **Volume-ID** field, `?????L!([1-4])` will display all eight character **Volume-ID's** that start end in anything other than 1, 2, 3 or 4.

The screenshot shows the TapeTrack interface with the same navigation bar. The 'Volumes' section table has a filter applied to the ID column with the value '?????L!([1-4])'. The table displays 3 rows of volume data, all with 'Library' as the current location and 'Unspecified' as the due in status.

ID	Current Location	Target Location	Flags	Move Time	Due in	Container	Next Move	Deleted
?????L!([1-4])	Enter text h...	Enter text ...	Enter ...	Enter t...	Enter t...	Enter t...	Enter ...	E
200000L5	Library		CEn		Unspecified	Unassigned	Permanent	
200012L5	Library		CEn		Unspecified	Unassigned	Permanent	
200022L5	Library		Cn		Unspecified	Unassigned	Permanent	

## Date Pattern Matching

TapeTrack Date Format

TapeTrack allows you to represent dates both as literal date values and date calculations.

### Syntax

- YYYY-MM-DD: ISO Date format.

- \*: Today.
- \*±x: Today ± number of days (x).
- M: The first day of this month.
- m: The last day of this month.
- Y: The first day of the year.
- y: The last day of the year.
- M±x: The first day of the month ± number of months (x).
- M±x±y: The first day of the month ± number of months (x), ± number of days (y).
- Y±x: The first day of the year ± x months.
- Y±x±y: The first day of the year ± number of years (x) ± number of months (y).
- Y±x±y±z: The first day of the year ± number of years (x) ± number of months (y) ± number of days (z).

### Examples

*-10	10 days ago
Y	the beginning of this year
M-1	the last day of last month
y-1	the last day of last year
Y-1+3-1	the last day of February last year

From:  
<https://rtfm.tapetrack.com/> - **TapeTrack Documentation**

Permanent link:  
[https://rtfm.tapetrack.com/general/pattern\\_matching?rev=1579743847](https://rtfm.tapetrack.com/general/pattern_matching?rev=1579743847)

Last update: **2025/01/21 22:07**

