



## Streaming Service Data Format Notes

### WHO WE ARE

Arrakis Systems has created automation software for all types of customers. The 3 main automation software we currently sell and manufacture are:

Automation Product	Description	Price
New~Wave	Entry level. Hard disk & Live assist automation software. Appropriate for small radio & Internet radio stations.	\$750.00
Digilink-Xtreme	Standard automation. Hard disk, Live assist, Satellite, Ball Games, etc..	\$100 per month, or \$6,500 buyout
Digilink-HD	Flagship automation. Full featured and extremely powerful.	\$200 per month, or \$10,500 buyout

More information on the product and their features may be found on our website in the Automation section.

### STREAMING SERVICE INTERFACE

Our automation software is designed to work optimally with any streaming service. Here are some key components and rules to the process:

#1 RUN THE SOFTWARE ON SEPARATE COMPUTERS – Our strong recommendation is that the automation software should be ran on one PC, and the streaming service encoder & software should be ran on a separate computer.

#2 ROUTING AUDIO– We will assist the customer route the audio from our automation software to the streaming service PC.

#3 ARTIST & TITLE DATA TRANSMISSION – To facilitate ease of interfacing with streaming services, our automation software has multiple options for output and integration. It is the streaming service's responsibility to select which method they prefer to use. After they select the preferred method, we will add the instructions on our website as to how to interface their streaming software to our automation systems.



## DATA TRANSMISSION OUTPUT FORMATS

This feature provides several generic data interfaces for Arrakis radio automation software to communicate with Internet streaming provider software. This feature allows Internet service providers to read data about the currently playing audio file for display while streaming audio. The formats also provide enough information for 'ad insertion' if the specific Internet service provider has the capability. For convenience, several industry standard formats are provided to choose from.

### SOFTWARE VERSION

New~Wave

Version 1.0.2 or later

Date 8-14-2013 or later

Digilink-Xtreme

Windows OS: Windows 7

Version 1.60.0 or later

Date 8-13-2013 or later

Digilink-HD

Version 1.0.1 or later

Date 8-14-2013 or later

### INSTALLATION

No installation is required for Arrakis automation software.

The internet service provider software must be configured to read the appropriate play log file located in the '...\Streaming Services' folder. Contact your internet service provider for any configuration questions.

### HOW THIS WORKS

Arrakis automation software will write a file to the '...\Streaming Services' folder each time a new audio file is played. The file always has the same name so the data in the file changes as the new audio file is played. The Internet service provider software will typically be run on a separate PC from the automation software so that they will not compete for PC resources. The two PCs will be connected by an ethernet network. The Internet service provider software will be mapped across the network to read the data in the file in the Arrakis automation PC's '...\Streaming Services' folder. The Internet service provider software will then use the data for display while streaming audio.

### GENERIC FORMATS

#### File Locations

1) Digilink-Xtreme

C:\Arrakis\Xtreme\Streaming Services

2) New~wave

C:\NEW~WAVE\Streaming Services

3) Digilink-HD

C:\DHD\Streaming Services



## FORMAT 1

The text line is located in ‘...\\Streaming Services\\Format 1.txt’

The line will be formatted as:

^Title~Artist~Duration~Category~cutID|

where

- a) the first field is the title of the song
- b) the 2nd field is the artist of the song
- c) the 3rd field (duration) can be HH:MM:SS or MM:SS
- d) the 4th field is the category: C,O or M for Commercial, Other, or Music
- e) the 5th field (cutID) is the unique cart number for the song
- f) the start character is a caret (^)
- g) the end character is a pipe (|)

Example:

^South City Midnight Lady~Doobie Brothers~05:23~M~29999|

## FORMAT 2

The text line is located in ‘...\\Streaming Services\\Format 2.txt’

The line will be formatted as:

C|1:00|Title|Artist

where

- a) the first field is C,O or M for Commercial, Other, or Music
- b) the second field (1:00) is the length of the audio file
- c) the 3rd field (Title) is the title of the song
- d) the last field (Artist) is the artist of the song
- e) the pipe (|) character separates the fields
- f) there are no spaces between the pipe character and the data
- g) the line will be ended with a ‘Line feed’ which is a non-printable character

Example:

M|5:23|South City Midnight Lady|Doobie Brothers

## FORMAT 3

Not yet assigned

**FORMAT 4**

The data is located in ‘...\\Streaming Services\\Format 4.xml’

The data will be formatted as in the following example:

```
<?xml version="1.0" encoding="UTF-8"?>
<NowPlaying>
<Current>
<AffiliateID></AffiliateID>
<Artist><![CDATA[Doobie Brothers]]></Artist>
<Title><![CDATA[South City Midnight Lady]]></Title>
<Album><![CDATA[Best of the Doobie Brothers]]></Album>
<Duration>00:05:23</Duration>
<Category><![CDATA[Music]]></Category>
<RecordLabel><![CDATA[]]></RecordLabel>
<Composer><![CDATA[]]></Composer>
</Current>
</NowPlaying>
```

Note1: the Category field will be filled with 'Spot', 'Music', or 'Other' depending on the type of audio file.

Note2: if a file exists '...\\Streaming Services\\Format 4 Music Only.txt' then only 'Music' category files will be logged.

**FORMAT 5**

The data is located in ‘...\\Streaming Services\\Format 5.xml’

The data will be formatted as in the following example:

```
<?xml version="1.0" encoding="UTF-8"?>
<TRACK>
<Artist>Doobie Brothers</Artist>
<Album>Z
<Title>South City Midnight Lady</Title>
<Duration>00:05:23</Duration>
<Category>M</Category>
</TRACK>
```

Note: the Category field will be filled with:

'M' for music

'S' for spot/commercial

other letters for other Arrakis automation softwarecategories

**FORMAT 6**

The text line is located in '...\Streaming Services\Format 6.txt'

The line will be formatted as:

Category~Artist~Title~Album~~Duration

where

- a) the first field is the Category (Song, Commercial, Other, empty)
- b) the second field is the Artist
- c) the 3rd field is the Title
- d) the 4th field is the Album title
- e) the 5th field is blank
- f) the last field is the length of the audio file in seconds
- g) all fields are separated by the tilde character (~)

Example:

SONG~Doobie Brothers~South City Midnight Lady~Best of the Doobie Brothers~~323

Note 1: the Category field will be filled with:

'Song' for Arrakis type 'M' music

'Commercial' for Arrakis type 'S' spot/commercial

'Other' for custom entered Arrakis cart types

'empty' if not types 'M', 'S', or custom types

Note 2: to have other Arrakis cart types displayed (such as J for jingle) as 'Other' instead of empty, create a text file '...\Streaming Services\Format 6 Categories.txt'. In the first line in the text file add a string of uppercase cart types that you would like to support. Example: JNW. In the example, Arrakis audio files of type J for jingle, N for news, and W for weather could have their data displayed instead of being 'empty' with no display of data.

Note 3: Format 6 will also create a duplicate log file at a custom saved network path and custom filename. To do this, save the complete path (including any filename that you want) in '...\Streaming Services\Format 6 Path.txt'. This feature makes it possible to save the log line to the Streaming PC itself rather than have the Streaming PC mapped to the Automation PC over the network.



## RS232 INTERFACE (in addition to file sharing)

- a) The supported generic format will send the data string out an RS232 com port to the Internet streaming PC if configured for this option.
- b) Supported RS232 formats
  - 1) Digilink-Xtreme supports both Format 1 and Format 2
  - 2) New~wave and Digilink-HD support Format 2

### c) RS232 SETUP

Two things need to be set up for the Arrakis automation to send the data out an RS232 port.

First, an RS232 com port must be assigned for the automation software to talk to a second PC. This is done by creating a text file that the Arrakis automation software reads for the RS232 setup.

- 1) create a text file named 'Streaming Comport Setup.txt'
- 2) In the first line in the text file, place the RS232 com port number (i.e- 3)
- 3) In the second line in the text file, place the baud rate (i.e- 9600)  
Please note that the baud rate must be the same for both PCs.
- 4) Save the text file into the '...\Streaming Services' directory.

Second, it is also necessary to tell the Arrakis automation software to activate the RS232 interface. This is done by creating another text file. The file needs to have no actual text in it. The Arrakis automation software simply looks for a file with this name. The file is named 'Format 1 enabled.txt' or 'Format 2 enabled.txt' and is also placed in the '...\Streaming Services' directory. You should create a file only for one format (example: Format 1), not both Format 1 and Format 2.

Last, if the Arrakis automation software is open, then restart the software so that it will read the commands to establish this new RS232 com port.



## SELECTED INTERNET SERVICE PROVIDER FORMATS

This is a partial list of ISPs and the generic Arrakis Formats that they support.

- a) Format 1:
  - a) BE TRE
  - b) Triton
  - c) Streaming Software Solutions
- b) Format 2:
  - a) SurferNetwork
- c) Format 3: not used
- d) Format 4:
  - a) Securenet
  - b) Arctic Palm
- e) Format 5:
  - a) Live365
  - b) Meridix
- g) Format 6:
  - a) Liquid Compass