

Tartan Exchange – the .ttn File Format. V 3.1



Overview

The .ttn format was developed in 1999 for use with the original Tartan Generator program and has been extended over time. The current version incorporates additional detailed colour 'swatch' information to allow for colour accurate photorealistic rendering of the finished cloth and is used by the current version of Tartan Designer (V 3.1.1) as its default file format. The format contains a variety of information relating to the tartan including: name, sett, category, notes, colours (swatch), colour notes, and other fields – see table 1 for a full listing. The format is open, readable using any text editor, and extendable. File sizes are small – around 10KB, allowing for straightforward transfer of designs by download or email. It is designed to be used as a common standard for the exchange of tartan information between different programs and databases. TartanWeb Ltd has placed the use of this format into the Public Domain.

It is fully compatible with Tartan Viewer – a free tartan reader program. This allows, for example, a designer to send full resolution tartan designs to clients by email in the knowledge that these will be close to finished woven examples. A mill would also have sufficient information within the .ttn format to accurately weave cloth, both now and in the future. (Tartan Viewer will also render designs from V 1.2 of the .ttn format – as used by the original Tartan Generator, but defaults to the Modern colour swatch.) In view of the large number of designs in existence created with the original Tartan Generator it is recommended that any program using the format has backward compatibility to V 1.2. Tartan Designer V 3.1.1 will automatically convert a V 1.2 .ttn to a V 3.1 .ttn if the file is opened and then saved.

Proposed future developments of the .ttn format include fields for Scale, Thread Weight, Threads per Millimetre, Thread Material, Designer, Design Commissioner, Country of Origin, Dates, Registration Details, Copyright and Trademark information, Weaving Mill details with stock numbers, Security Hash (to ensure that the file has not been altered since its original creation), among others. We intend to move the .ttn format to XML for the next generation of programs. This will ensure greater flexibility in data exchange between applications and databases and ease the implementation of data transfer within our new generation of web based tartan applications. Backward compatibility, though, will be ensured between all versions.

File Format

The file format used is currently based on the standard Microsoft 'ini' file format and is easily readable using the functions built into the Windows API. Sections and Fields are as follows, all fields are required unless marked optional, in which case the field name should be included but with a blank value.

Section	Field	Description	Examples
Tartan		This section contains information about the tartan and weave	
	Name	The tartan name	TDN419: MacDonald
	Threads	Set description, using standard Tartan Society format	~PB16R2B4R6B24R2K24G24R6G4R2G16

	Category	Optional free format category for the tartan	Clan, Pipe Band
	Index	Optional tartan index number for use with Tartan Registry	
	Texture	Optional, but reserved field for future Tartan Designer use	@0008749@
	NoteLinesCount	Number of lines of notes	11
	NotesN, e.g. Notes0, Notes1	Lines of notes text, numbered from 0 to NoteLinesCount-1	This is oldest recorded version of the Clan sett.
	Swatch	This section contains information about the swatch (colour set) used.	
	Name	Name of the swatch	Modern
	Desc	Description of swatch	Modern tartan colors. Standard swatch
	SwatchDyeCount	Number of dyes in swatch	134
	CodeN, e.g. Code0, Code1	Colour code, numbered from 0 to SwatchDyeCount -1	DW
	NameN, e.g. Name0, Name1	Optional: Colour name, numbered from 0 to SwatchDyeCount -1	Dark grey
	RGBN, e.g. RGB0, RGB1	RGB value of dye, numbered from 0 to SwatchDyeCount -1	AFAFAF
	PantoneN, e.g. Pantone0, Pantone1	Optional: Pantone number of dye	
	DescN, e.g. Desc0, Desc1	Optional: Description of colour	

Table 1

Extension and use by third parties.

It is recommended that third party programs using the .ttn file format should add additional fields they may require into their own section to avoid conflicts. We suggest that if it is desired to add fields to the swatch or tartan sections this should be notified to TartanWeb so we can act as a central clearing house. We intend to place such information on the web in a publicly accessible location together with a support and discussion forum.

Programs writing the .ttn format should always include fields marked as required in the above format. Programs reading the format should expect to read the fields as described above, but should silently ignore any additional fields not understood by the program. We are happy to advise on any queries or issues arising.

The Tartan Generator Team, October 2007.