TMUP
TRACKMANIA URL PROTOCOL

SPECIFICATIONS

This is a draft document to the TMUP 2.0 specifications.

VERSION : 1.92 (DRAFT)

Document evolution		
Version	**Date**	**Comments**
2.00	2006-11-18	Official TM United support TM United data folder TMU environment code allowed with SKIN_3D
1.92	2006-10-29	TM United beta 4 support TMU doesn't support GHOST and CAMP types Adding : AIRSHIP
1.91	2006-09-20	TM United beta 1 support
1.90	2006-07-10	Draft for TM United beta support MAP_ZIP removed
1.05	2006-02-28	Correction : SUBOBJECT was screwed
1.04	2006-02-05	All map types can use game tag instead of environment tag Adding : SUBOBJECT, INFLATABLE Correction : Typo on Yacht and Cargo types Correction : TM Nations doesn't support map images & vidéo
1.03	2006-01-20	Support for TM Nations ESWC
1.02	2005-10-29	Adding : MT_IMG, MT_SND, MUSIC Reorganized Media Tracker section
1.01	2005-10-25	Correction : TrackMania Layer directory
1.00	2005-10-22	Official release Adding TMO from Power-Up install registry key
0.93	2005-10-09	Adding # as alternative separator for TMUP URL Correction : Other file support in PANEL type
0.92	2005-09-30	Correction : folder in CAMP type was wrong Precision : folder transcript in MATCH type
0.91	2005-09-28	Support for MAP_IMG for TMO Correction : Missing Zip file type support Correction : Bad environment in MATCH type
0.90	2005-09-18	Added : CLIP, CARGO, YATCH, MATCH types Support : TrackMania Original and Sunrise Extreme Added : HTML Support file template Correction : Zip structure
0.10	2005-05-21	First draft

SUMMARY

1. INTRODUCTION

The addicting Nadeo video game TrackMania offers the players many ways to improve the gaming experience. In Sunrise, you can add new maps, new skins, 3D car models, panels, signs, mods, layers, stickers... All those resources have to be downloaded from the many web sites providing them, and copied (or even unzipped) in the right folder. With TrackMania Original and TM Nations ESWC, they are the TrackMania "Legacy" which this TMUP was designed for.

TrackMania United is now available. Nadeo as compiled all the legacy environments into one game. This means that all maps, skins, mods (...) created for legacy TrackMania games are now available for TrackMania United. This means that TMUP client software must be smarter than before. Futher more, Nadeo has changed the directory structure of TrackMania to fit in Microsoft Windows Vista compliance.

As there are many different types of resources, there are many folders, many naming conventions. Those possibilities are a drawback for new gamers. Even the most experienced players are not fond of those operations. Further more, it's not easy to keep track of what you have grabbed from different web sites. Uninstalling maps, or skins is not that simple.

This document describes a new way to help TrackMania players and webmasters to handle downloads from any web navigator (Internet Explorer, FireFox, etc). This system is based on **TrackMania URL Protocol** (TMUP) and a **specific client software** for downloading and installing the files.

The document is divided in three chapters. In the first one, the protocol will be described. In the second part, hints are given for webmasters to integrate TMUP links on their own websites. Finally, in the last part, some advises will be given to create a compatible TMUP client software.

2. TMUP PROTOCOL

2.1. URL STRUCTURE

2.1.1. Basics

TMUP is basically a new type of URL. This URL is constructed on the standard HTTP URL of an existing file or script.

The general format of the URL is one of those :

```
tmup://[ADDRESS]|[TYPE]|[ENV]
tmup://[ADDRESS]#[TYPE]#[ENV]
```

If the URL of an island skin is

```
http://www.mywebsite.com/virdualdir/myfile.zip
```

the TMUP URL will be one of those

```
tmup://www.mywebsite.com/virdualdir/myfile.zip|SKIN|ISLAND
tmup://www.mywebsite.com/virdualdir/myfile.zip#SKIN#ISLAND
```

A TMUP URL is divided in several parts. A pipe or a sharp character (| **or** #) separates each part. The first part contains the URL which is to be used to get the file. The second part contains two parameters which helps the TMUP client to install the file.

2.1.2. Parameters list

Here are the different parameters in a TMUP URL.

URL address [address]	This is the original http URL witch protocol has been switched to **tmup:** instead of **http:**. This address has to be used by the client to get the requested file on the web server. Every thing you can do in http URLs can be done in the address part of TMUP URLs, including http parameters (GET method only).
File Type [type]	This parameter describes to the client the type of the file that will be grabbed from the web server.
Environment [env]	This parameter describes which environment or game can handle the file. This is usually used to get the right folder for installation.

2.1.3. Parameters order

Parameters must be set in a specific order. First the address, then the file type, and finally the environment or game.

2.1.4. Importance of parameters

Parameters are always mandatory. If the Environment parameter is irrelevant, you still have to set the game tag ("TMO", "TMS", "TMN" or "TMU".)

2.2. PARAMETERS SUMMARY

2.2.1. URL Address

The address to be set is the original http URL which protocol has been switched to **tmup:** instead of **http:**. This address has to be used by the client to get the requested file on the web server. The address can be a static file, or a dynamic script. If you pass http parameters, you have to set them in the URL (GET method). POST method is not supported.

The address must be absolute and cannot be relative. The protocol, server and full virtual path is required.

Here are some examples of TMUP URL.

```
tmup://www.tm-community.com/?page=download&id=87|PANEL|TMO
tmup://sunrise.tm-exchange.com/get.aspx?action=trackgbx&id=88678|MAP|ISLAND
tmup://www.tm-community.com/upload/Mercedes_SL600.zip#SKIN_3D#COAST
```

2.2.2. File type

This parameter describes the type of the file that will be grabbed from the web server (using the address parameter). This information helps the client to set the destination folder and the file name of the downloaded http content. This parameter is not case sensitive.

File type	Type parameter
Challenge	MAP
Match settings	MATCH
Ghost	GHOST
Map image	MAP_IMG
Map bik video	MAP_VID
Replay	REPLAY
MediaTracker Clip	CLIP
MediaTracker Image	MT_IMG
MediaTracker Sound	MT_SND
MediaTracker Music	MUSIC
Campaign	CAMP
Painter layer	LAYER
Painter stencil	STENCIL
Painter sticker	STICKER
Painter sub objects	SUBOBJECT
User profile	PROFILE
User scores	SCORES
Avatar	AVATAR
Panel bloc	PANEL
Sign bloc	SIGN
Building bloc	BUILD
Flat bloc	FLAT
Shop bloc	SHOP
Cargo bloc	CARGO
Yacht bloc	YACHT
Inflatable bloc	INFLATABLE
Air Ship bloc	AIRSHIP
Car skin	SKIN
Car skin and 3D model	SKIN_3D
Texture mod	MOD
TMUP link list	TMUP_LIST
Structured ZIP package	TMUP_PACK

2.2.3. *Environment*

This parameter describes which environment can handle the file. This is usually used to get the right folder for installation. You must use the environment name and not the car name. Use ISLAND instead of SPORTCAR. This parameter is not case sensitive.

If the environment is irrelevant, you still have to set the Environment to "TMS" value to indicate Sunrise game, or "TMO" for TrackMania Original.

TrackMania environment	Environment parameter
United, no env specified	TMU
Nations, no env specified	TMN
Nations or United, Stadium	STADIUM
Sunrise, no env specified	TMS
Sunrise or United, Island	ISLAND
Sunrise or United, Coast	COAST
Sunrise or United, Bay	BAY
Original, no env specified	TMO
Original or United, Desert	SPEED
Original or United, Snow	ALPINE
Original or United, Rally	RALLY

Power-Up or Original are handles the same way. The TMUP protocol doesn't identify then game version but only the game itself. It's the TMUP client software that will decide to handle the file for Power-Up, Speed-Up or Orignal.

To be coherent with current notation, TM Nations environment is specified as STADIUM, even if there is only one environment.

2.2.4. *Important notice about TrackMania United*

This is the main evolution of this 2.0 specifications.

TMU is supported as in legacy games. If you want to link to a Sportcar vehicle for TMU, you have to use the same link as the sport car for TMS

```
tmup://www.tm-community.com/upload/Mercedes_SL600.zip#SKIN_3D#ISLAND
```

The client will trigger the installation in TMU or TMS depending on TM games you have and your preferences.

For links which using the game tag, client software have to use the following rules.
- TMS : should be installed either in TMS or TMU
- TMO : should be installed either in TMO or TMU
- TMN : should be installed either in TMN or TMU
- TMU : should be installed only in TMU

Beware, check 4.2.5 for more information about the new folder structure of TM United. All files must be installed in the windows user personal folders, instead of GameData as for legacy games.

2.2.5. _File Name_

This is a very specific parameter. This parameter is not provided in the TMUP URL. It comes directly from the website. The client software grab this parameter during the file download.

Basically the file name is present in the response URI from the website, or in the "Content-Disposition" response header. _See §4.2.3 for more information (Technical hint – Extracting all parameters)._

2.3. SUPPORTED FILE TYPES

In this section, supported file types are listed. Each file type is described with the following data.

- File type : tag you have to set in a TMUP URL.
- Environments : possible tags you have to set in a TMUP URL (use only one).
- Target filename : how the downloaded file should be named and where the client install it.
- Target folder : where the downloaded file should be installed, under the "user folder".
- Location support : shows if the client should create a locator and how the file must be named.
- Packed location : full pathname when you're creating a TMUP "Structured Zip Package".

2.3.1. _Maps, replays, ghosts and in-game images_

Maps are the most exchanged files. In Sunrise, Nadeo has added many improvements. You can create a specific 4 or 7 ghosts replay, you can add an image which would appear in the game menu, or even a BIK video. The TMUP protocol also introduce a simple map pack, which includes only one map with its ghosts and image.

2.3.1.1. _Maps_

Maps are a specific case because the file name can be retrieved from the file itself. This is possible since Sunrise. As TM display the internal map name in the game, the real file name is used to connect the map to the in-game picture or bik video.

File type	MAP
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM, TMO, TMS, TMN, TMU
Target file name	[name] = *.Challenge.Gbx
Target folder	Tracks\Challenges
Locator support	No
Packed location	Challenges\[env]\[name]

Client advise :
- Check the downloaded file name is `*.Challenge.Gbx`.
- Don't use the internal file name, you could loose the link to the image or bik video.
- Use sub folders for installation
- Games code can be used as alternative for the environment

2.3.1.2. _Match Settings_

Match settings is a new feature added in TM Sunrise Extreme and TM Original. It's a simple recording of a server creation. A XML file includes the parameters of the server (game type, rules...) and the challenge list. So the player has to set the name of his server, the number of players and load the Match Settings to run the server.

File type	MATCH
Environments	TMS, TMO, TMN, TMU
Target filename	[name] = *.txt
Target folder	Tracks\MatchSettings
Locator support	No
Packed location	Match\[name]

Client advise :
- The TXT file is a XML file.
- If the maps are not present, the match setting file is useless.
- The location of each challenge in the XML file is a relative path. For example :
```
<challenge>
     <file>Challenges\My Challenges\SomeFolder\MyMap.Challenge.Gbx</file>
     <file>Campaigns\Downloaded\SomeFolder\MyCamp\MyMap.Challenge.Gbx</file>
</challenge>
```
- If the maps where downloaded before using the match settings, they might not be in the specified folder. So the client have to change the path of each map in the match setting when installing it. For example :
```
<challenge>
     <file>Challenges\TMUP\MyMap.Challenge.Gbx</file>
     <file>Campaigns\Downloaded\TMUP\MyCamp\MyMap.Challenge.Gbx</file>
</challenge>
```
- For TMN and TMU, the challenge section contains the UID of the map(internal map identifier). In this case, you don't have to transcript the path of the maps in the Match Settings file..

2.3.1.3. _Ghosts_

Ghosts are basically replays. They are created with the Ghost Editor build in TM Sunrise and TM Original. Their name is not significant because they are linked to the map by the internal map identifier. Whatever file name you give, the replay will be linked to the map with the same internal map identifier.

File type	GHOST
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM, TMO, TMS
Target filename	[name] = *.Replay.Gbx
Target folder	Tracks\Challenges
Locator support	No
Packed location	Challenges\[name]

Client advise :
- Check the downloaded file name is *.Replay.Gbx.
- Use sub folders for installation
- TMNations ESWC and TM United don't support ghosts files.
- Games code can be used as alternative for the environment

2.3.1.4. Map Images

The file name is very important because it's the only link to the map. The image file name has to match the map file name (not the internal map name). The image has to be in the same folder as the map.

File type	MAP IMG
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM, TMO, TMS, TMU
Target filename	[name] = *.dds, *.jpg
Target folder	Tracks\Challenges
Locator support	No
Packed location	Challenges\[name]

Client advise :
- Check the downloaded file name is *.dds or *.jpg
- Use sub folders for installation
- Not supported in TM Nations
- Games code can be used as alternative for the environment

2.3.1.5. Map Bik video

The file name is very important because it's the only link to the map. The video file name has to match the map file name (not the internal map name). The video has to be in the same folder as the map.

File type	MAP VID
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM, TMS, TMU
Target filename	[name] = *.bik
Target folder	Tracks\Challenges
Locator support	No
Packed location	Challenges\[name]

Client advise :
- Check the downloaded file name is *.bik.
- Use sub folders for installation
- Not supported in TM Original and TM Nations
- Games code can be used as alternative for the environment

2.3.1.6. Simple Map Pack

This file type has been removed due to lack of usefulness. It's no to be supported in TMUP v2.0.

2.3.1.7. _Replays_

Replays can be used as solution to a puzzle, a friend challenging ghost or a movie like race. In this section, Ghost replays (made by the ghost editor for the solo races) are excluded. *See $2.3.1.2 (Ghosts)*.

File type	REPLAY
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM, TMO, TMS, TMN, TMU
Target filename	[name] = *.Replay.Gbx
Target folder	Tracks\Replays
Locator support	No
Packed location	Replays\[name]

Client advise :
- Check the downloaded file name is *.Replay.Gbx.
- Use sub folders for installation
- Games code can be used as alternative for the environment

2.3.2. _Campaigns_

Campaigns were introduced in TM Speed-Up alpha . They are packaged Zip containing several maps and one campaign construction file.

Please remember that the Campaign is not only the *.ConstructionCampaign.Gbx file, but also all the maps, ghosts replays, map images /video inside the zip file, provided they match the rules stated above.

File type	CAMP
TrackMania game	TMS, TMO
Target filename	[name] = *.zip
Target folder	Tracks\Campaigns\Downloaded
Locator support	No
Packed location	Campaigns\[name]

Client advise :
- Check the downloaded file name is *.zip
- Do not unzip a campaign
- Use sub folders for installation
- TMNations ESWC and TM United don't support campaigns.

2.3.3. *Media Tracker*

The Media Tracker is a great way to improve your maps by adding some music, camera effects, etc. Introduced in TM Speed-Up and TM Sunrise, the Media Tracker was modified in TM Original and TM Sunrise Extreme. Some new features and missing ones were added.

Using TMUP links to add a bunch of Media Tracker files can help players to create and improve there mapping skills.

2.3.3.1. *Media Tracker Clips*

The media tracker is a new feature introduced in TM Sunrise. When you edit a media tracker in a map or a replay, you can import or export clips. So you can distribute your own clips to help other players to use the media tracker.

File type	CLIP
TrackMania game	TMS, TMO, TMN, TMU
Target filename	[name] = *.Clip.Gbx
Target folder	Tracks
Locator support	No
Packed location	Clips\[name]

Client advise :
- Check the downloaded file name is `*.Clip.Gbx`.
- You can use sub folders for installation

2.3.3.2. *Media Tracker Images*

Since TMSX and TMO, you can add images in your map using the Media Tracker. JPG, uncompressed TGA, DDS are supported. BIK is supported only in Sunrise.

File type	MT_IMG
Environments	TMS, TMO, TMN, TMU
Target filename	[name]
Target folder	Legacy TM : Skins\MediaTracker\Images
	TMU : MediaTracker\Images
Locator support	[name].loc
Packed location	mt_images\[name]

Client advise :
- Check the downloaded file name is `*.tga, *.bik, *.jpg or *.dds`
- Locator must be named `*.tga.loc, *.bik.loc, *.jpg.loc or *.dds.loc`. Use the HTTP URL in the locator.
- BIK images/video are not supported in TMO
- Do not use sub folder as it change the effective name of the image.

2.3.3.3. *Media Tracker Sounds*

Since TMSX and TMO, you can add sounds in your map using the Media Tracker. Only uncompressed WAV (pcm, 8 or 16 bit, mono or stereo 8-44kHz), OGG and MUX are supported. All sounds must be mono.

File type	MT SND
Environments	TMS, TMO, TMN, TMU
Target filename	[name]
Target folder	Legacy TM : Skins\MediaTracker\Sounds TMU : MediaTracker\Sounds
Locator support	[name].loc
Packed location	mt_sounds\[name]

Client advise :
- Check the downloaded file name is *.wav, *.ogg, or *.mux
- Locator must be named *.wav.loc, *.ogg.loc or *.mux.loc. Use the HTTP URL in the locator.
- Do not use sub folder as it change the effective name of the image.

2.3.3.4. *Music*

Since TMSX and TMO, you can add music in your map using the Media Tracker. Only OGG and MUX are supported.

File type	MUSIC
Environments	TMS, TMO, TMN, TMU
Target filename	[name]
Target folder	Legacy TM : Skins\ChallengeMusics TMU : ChallengeMusics
Locator support	[name].loc
Packed location	musics\[name]

Client advise :
- Check the downloaded file name is *.ogg, or *.mux
- Locator must be named *.ogg.loc or *.mux.loc. Use the HTTP URL in the locator.
- Do not use sub folder as it change the effective name of the image.

2.3.4. _Painter tools : layers, stencils, stickers, sub objects and their icons_

The Garage and the Painter where added for Sunrise. All files in this section have common file name. So the download cannot be done by simply downloading the file and saving it with its own name. The folder of the layer gives its name, not the file itself.

To solve this problem, TMUP states that all layers must be in a zip file. The name of the zip file is the name of the layer (remove the ".ZIP" extension) . One zip contains only one layer and its icon. It may contains folders, but they aren't significant, they must be ignored by the client.

Stencils and stickers follow the same rules.

2.3.4.1. _Layers_

Layers are zip files containing a Layer.dds and a Icon.dds files. The files must be unzipped before installation in the right folder.

File type	LAYER
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM
Target filename	Layer.dds & Icon.dds
Target folder	Painter\Layers\[special env]\[name]
Locator support	No
Packed location	Layers\[env]\[name].zip

Client advise :
- Unzip all files in the same folder, don't save the downloaded file
- For [special env] parameter in target folder, you must set `STADIUMCAR`, `SPORTCAR`, `COASTCAR`, `BAYCAR`, `AMERICAN`, `SNOWCAR` and `RALLY` instead of `STADIUM`, `ISLAND`, `COAST`, `BAY`, `SPEED`, `ALPINE` and `RALLY`
- For [env] parameter in packed location, you must keep `STADIUM`, `ISLAND`, `BAY`, `COAST`, `SPEED`, `ALPINE`, `RALLY`.
- Check for presence of Layer.dds & Icon.dds
- Ignore folders in the ZIP package
- Do not use sub folders

2.3.4.2. _Stencils_

Stencils are zip files containing a Brush.tga and a Icon.dds files. The files must be unzipped before installation in the right folder.

File type	STENCIL
Environments	TMS, TMO, TMN, TMU
Target filename	Brush.tga & Icon.dds
Target folder	Painter\Stencils\[name]
Locator support	No
Packed location	Stencils\[name].zip

Client advise :
- Unzip all files in the same folder, don't save the downloaded file
- Check for presence of Brush.tga & Icon.dds
- Ignore folders in the ZIP package
- Do not use sub folders

2.3.4.3. Sticker

Stickers are zip files containing a Sticker.tga and a Icon.dds files. The files must be unzipped before installation in the right folder.

File type	STICKER
Environments	TMS, TMO, TMN, TMU
Target filename	Sticker.tga & Icon.dds
Target folder	Painter\Stickers\[name]
Locator support	no
Packed location	Stickers\[name].zip

Client advise :
- Unzip all files in the same folder, don't save the downloaded file
- Check for presence of Sticker.tga & Icon.dds
- Ignore folders in the ZIP package
- Do not use sub folders

2.3.4.4. Sub Objects

Sub objects are introduced in TM Nations ESWC to paint specific parts of the car. Sub objects are zip files containing a SubObject.dds and a Icon.dds files. The files must be unzipped before installation in the right folder.

File type	SUBOBJECT
Environments	STADIUM
Target filename	SubObject.dds & Icon.dds
Target folder	Painter\SubObjects\[special env]\[name]
Locator support	no
Packed location	SubObjects\[env]\[name].zip

Client advise :
- Unzip all files in the same folder, don't save the downloaded file
- For [special env] parameter in target folder, you must set STADIUMCAR instead of STADIUM.
- For [env] parameter in packed location, you must keep STADIUM.
- Check for presence of SubObject.dds & Icon.dds
- Ignore folders in the ZIP package
- Do not use sub folders

2.3.5. <u>*User data : profiles, scores and avatars*</u>

Players might want to exchange their personal files. TMUP provided a simple way to do it.

2.3.5.1. <u>*Profile*</u>

Profiles helps players to get more coppers to create maps.

File type	PROFILE
Environments	TMS, TMO, TMN, TMU
Target filename	[name] = *.Profile.Gbx
Target folder	Profiles
Locator support	No
Packed location	Profiles\[name]

Client advise :
• Check the downloaded file name is `*.Profile.Gbx`.
• Do not use sub folders.

2.3.5.2. <u>*Scores*</u>

By getting Scores files, you'll add other players times in the in-game map display.

File type	SCORES
Environments	TMS, TMO, TMN, TMU
Target filename	[name] = *.Scores.Gbx
Target folder	Scores
Locator support	No
Packed location	Scores\[name]

Client advise :
• Check the downloaded file name is `*.Scores.Gbx`.
• Do not use sub folders.

2.3.5.3. <u>*Avatars*</u>

Avatars are small pictures used in multiplayer. Sub folders are usable, but there will be no effect in the game display.

File type	AVATAR
Environments	TMS, TMO, TMN, TMU
Target filename	[name]
Target folder	Skins\Avatars
Locator support	No
Packed location	Avatars\[name]

Client advise :
• Check the downloaded file name is *.jpg, *.dds or *.bik
• You can use sub folders.

2.3.6. *Skinable blocs : panels, signs, buildings, flats and more*

This section covers the skins that can be selected on specific block. The reference to the skins are stored in the map data. So if you collect a map and you don't have the bloc skins, you can't see the skin. Further more, the name of the skin contains the folder tree. So if the skin doesn't perfectly match the original folder tree the skin won't activate.

2.3.6.1. *Panels*

Panels can be static (image included in a Zip file) or animated (bik file). A panel can be used in any environment on specific blocs.

File type	PANEL
Environments	TMS, TMO, TMN, TMU
Target filename	[name]
Target folder	Skins\Any\Advertisement
Locator support	[name].loc
Packed location	Panels\[name]

Client advise :
- Check the downloaded file name is `*.zip, *.bik, *.jpg or *.dds`
- Locator must be named `*.zip.loc, *.bik.loc, *.jpg.loc or *.dds.loc`. Use the HTTP URL in the locator.
- Do not unzip a panel (if zipped)
- Do not use sub folder as it change the effective name of the skin.

2.3.6.2. *Signs*

Signs can be static (image included in a Zip file) or animated (bik file).

As signs can be used in any environment, the client will install the sign only for one environment. If you want the players to install your sign in all environments, you should create 3 TMUP links, just changing the environment parameter (or better : use a TMUP URL list in which all links will target the same file).

File type	SIGN
Environments	ISLAND, BAY, COAST
Target filename	[name]
Target folder	Skins\[env]\Signs
Locator support	[name].loc
Packed location	Signs\[env]\[name]

Client advise :
- Check the downloaded file name is `*.zip, *.bik, *.jpg or *.dds`
- Locator must be named `*.zip.loc, *.bik.loc, *.jpg.loc or *.dds.loc`. Use the HTTP URL in the locator.
- Do not unzip a sign
- Do not use sub folder as it change the effective name of the skin.

2.3.6.3. <u>Buildings</u>

Buildings are always zip files. Buildings are only supported in Bay environment.

File type	BUILD
Environments	BAY
Target filename	[name]
Target folder	Skins\[env]\Buildings
Locator support	[name]loc
Packed location	Buildings\[env]\[name]

Client advise :
- Check the downloaded file name is `*.zip`
- Locator must be named `*.zip.loc` . Use the HTTP URL in the locator.
- Do not unzip a building
- Do not use sub folder as it change the effective name of the skin.

2.3.6.4. <u>Flats</u>

Flats are always zip files. Flats are only supported in Bay environment.

File type	FLAT
Environments	BAY
Target filename	[name]
Target folder	Skins\[env]\Flats
Locator support	[name].loc
Packed location	Flats\[env]\[name]

Client advise :
- Check the downloaded file name is `*.zip` or `*.bik`
- Locator must be named `*.zip.loc` or `*.bik.loc`. Use the HTTP URL in the locator.
- Do not unzip a flat
- Do not use sub folder as it change the effective name of the skin.

2.3.6.5. <u>Shops</u>

Shops are always zip files. Shops are only supported in Bay environment.

File type	SHOP
Environments	BAY
Target filename	[name]
Target folder	Skins\[env]\Shops
Locator support	[name].loc
Packed location	Shops\[env]\[name]

Client advise :
- Check the downloaded file name is `*.zip`
- Locator must be named `*.zip.loc`. Use the HTTP URL in the locator.
- Do not unzip a shop
- Do not use sub folder as it change the effective name of the skin.

2.3.6.6. *Cargo*

Cargo are always zip files. Cargo are only supported in Bay environment.

File type	CARGO
Environments	BAY
Target filename	[name]
Target folder	Skins\[env]\Cargo
Locator support	[name].loc
Packed location	Cargo\[env]\[name]

Client advise :
• Check the downloaded file name is `*.zip`
• Locator must be named `*.zip.loc`. Use the HTTP URL in the locator.
• Do not unzip a cargo
• Do not use sub folder as it change the effective name of the skin.

2.3.6.7. *Yachts*

Yachts are always zip files. Yachts are only supported in Coast environment.

File type	YACHT
Environments	COAST
Target filename	[name]
Target folder	Skins\[env]\Yacht
Locator support	[name].loc
Packed location	Yacht\[env]\[name]

Client advise :
• Check the downloaded file name is `*.zip`
• Locator must be named `*.zip.loc`. Use the HTTP URL in the locator.
• Do not unzip a yacht
• Do not use sub folder as it change the effective name of the skin.

2.3.6.8. *Inflatables*

Inflatables are always zip files. Yachts are only supported in Stadium environment.

File type	INFLATABLE
Environments	STADIUM
Target filename	[name]
Target folder	Skins\[env]\Inflatable
Locator support	[name].loc
Packed location	Inflatables\[env]\[name]

Client advise :
• Check the downloaded file name is `*.zip`
• Locator must be named `*.zip.loc`. Use the HTTP URL in the locator.
• Do not unzip an inflatable
• Do not use sub folder as it change the effective name of the skin.
•

2.3.6.9. *Air Ships*

Air ships are always zip files. Air Ship are only supported in Stadium environment in TM United.

File type	INFLATABLE
Environments	STADIUM
Target filename	[name]
Target folder	Skins\[env]\AirShip
Locator support	[name].loc
Packed location	AirShips\[env]\[name]

Client advise :
• Check the downloaded file name is *.zip
• Locator must be named *.zip.loc. Use the HTTP URL in the locator.
• Do not unzip an air ship
• Do not use sub folder as it change the effective name of the skin.

2.3.7. _Car skins and models_

Car skins can integrate a different 3D model. TMUP makes difference between regular skins and 3D car skins. The target folder is the same.

2.3.7.1. _Skins without model car_

Car skins are packaged in a zip and easy to handle. Sub folders are usable, but there will be no effect in the game display.

File type	SKIN
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM
Target filename	[name]
Target folder	Skins\Vehicles\[special env]
Locator support	[name].loc
Packed location	Skins\[env]\[name]

Client advise :
- Check the downloaded file name is `*.zip`
- Locator must be named `*.zip.loc`. Use the HTTP URL in the locator.
- For [special env] parameter in target folder, you must set STADIUMCAR, SPORTCAR, COASTCAR, BAYCAR, AMERICAN, SNOWCAR and RALLY instead of STADIUM, ISLAND, COAST, BAY, SPEED, ALPINE and RALLY
- For [env] parameter in packed location, you must keep STADIUM, ISLAND, BAY, COAST, SPEED, ALPINE, RALLY.
- Do not unzip a skin
- You can use sub folder.

2.3.7.2. _Skins with model car_

Car skins are packaged in a zip and easy to handle. Sub folders are usable, but there will be no effect in the game display.

File type	SKIN 3D
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM, TMU
Target filename	[name]
Target folder	Legacy TM : Skins\Vehicles\[special env] TMU : Skins\Vehicles\CarCommon
Locator support	[name].loc
Packed location	Skins_3D\[env]\[name]

Client advise :
- Check the downloaded file name is `*.zip`
- Locator must be named `*.zip.loc`. Use the HTTP URL in the locator.
- For [special env] parameter in target folder, you must set STADIUMCAR, SPORTCAR, COASTCAR, BAYCAR, AMERICAN, SNOWCAR, RALLY and CARCOMMON instead of STADIUM, ISLAND, COAST, BAY, SPEED, ALPINE, RALLY and TMU
- For [env] parameter in packed location, you must keep STADIUM, ISLAND, BAY, COAST, SPEED, ALPINE, RALLY.
- Do not unzip a skin 3D
- You can use sub folder.

2.3.8. <u>*Mods*</u>

Mods are packaged Zip files made to change the visual aspect of an environment. Mods support locators.

File type	MOD
Environments	ISLAND, BAY, COAST, SPEED, ALPINE, RALLY, STADIUM
Target filename	[name]
Target folder	Skins\[env]\Mod
Locator support	[name].loc
Packed location	Mods\[env]\[name]

Client advise :
- Check the downloaded file name is `*.zip`
- Locator must be named `*.zip.loc`. Use the HTTP URL in the locator.
- Do not unzip a mod.
- Do not use sub folder as it change the effective name of the skin.

2.3.9. <u>*TMUP link lists*</u>

When you want the user to DL several resources in one time, you can use a list of links. The list is stored in a text file which has no specific name, because it shouldn't be saved on hard disk.

The file format is very simple. A text file with one TMUP link on each line. Each of the included link must enforce all the TMUP protocol rules, except :
- It must not contain any TMUP_LIST resource.
- As the list don't have to be installed, it hasn't any environment parameter.

Example : you want to give a TMUP link to a map, its corresponding replay and its in-game image. You could set 3 links on your webpage, or create a TMUPLIST file and only one link on your webpage.

- Create the TMUPLIST file with this content
```
tmup://sunrise.tm-exchange.com/get.aspx?action=trackgbx&id=89550|MAP|ISLAND
tmup://www.tm-community.com/upload/MyChallenge.Replay.Gbx#GHOST#ISLAND
tmup://www.tm-community.com/upload/MyChallenge.Challenge.jpg|MAP_IMG|ISLAND
```

- Host this file somewhere. Now you can refer to this list using the TMUP link in your webpage. One click on this link will trigger three download and installation (not counting the list itself)
```
tmup://www.tm-community.com/upload/MyChallenge.tmup|TMUP_LIST
```

File type	TMUP_LIST
Environments	None
Target filename	None
Target folder	None
Locator support	No
Packed location	Not allowed

Client advise :
- Trigger all downloads from the included TMUP URLs

2.3.10. _TMUP Packed files_

Packs are somewhat useful to handle multiple files on a server. The TMUP package is a Zip file format, but it's part of the TMUP protocol. The process is simply different.

Instead of knowing where to install a resource before downloading it, you have to download the Zip. It is the structure of the zip that will tell where to install the files.

Packages have no specific name, because it shouldn't be saved on hard disk.

File type	TMUP PACK
Environments	TMS, TMO, TMN, TMU
Target filename	None
Target folder	None
Locator support	No
Packed location	Not allowed

Client advise :

• Install all the files in the downloaded Zip
• The file types must be get by analysing the Zip internal folders
• Do not put files for different TrackMania games in the same Zip.

2.3.10.1. _Example of a link to a structure pack :_

```
tmup://www.tm-community.com/upload/MyPack.zip|TMUP_PACK|TMS
```

2.3.10.2. _Internal structure of a Zip file_

You must set an recognise the files as follows. All folders name aren't case sensitive.

```
Root
        Challenges              <- MAP
                                <- GHOST
                                <- MAP_IMG
                                <- MAP_VID
        Replays                 <- REPLAY
        Match                   <- MATCH
        Campaigns               <- CAMP
        Clips                   <- CLIP
        MT_Images               <- MT_IMG
        MT_Sounds               <- MT_SND
        Musics                  <- MUSIC
        Layers      /[ENV]      <- LAYER
        Stencils                <- STENCIL
        Stickers                <- STICKER
        SubObjects  /[ENV]      <- SUBOBJECT
        Profiles                <- PROFILE
        Scores                  <- SCORES
        Avatars                 <- AVATAR
        Panels                  <- PANEL
        Signs       /[ENV]      <- SIGN
        Buildings   /BAY        <- BUILD
        Flats       /BAY        <- FLAT
        Shops       /BAY        <- SHOP
        Cargo       /BAY        <- CARGO
        Yacht       /COAST      <- YACHT
        Inflatable  /STADIUM    <- INFLATABLE
        AirShips    /STADIUM    <- AIRSHIP
        Skins       /[ENV]      <- SKIN
        Skins_3D    /[ENV]      <- SKIN_3D
        Mods        /[ENV]      <- MOD
```

3. CREATING COMPATIBLE WEBSITES

3.1. ADDING TMUP URL TO AN EXISTING WEBSITE

If you're a webmaster, you have a website to manage. Your website may be dynamic (using mostly scripts) or static (using simple HTML web pages). You probably make some source code adjustments in the script files.

In either case, supporting TMUP links is a very simple modification. You simply have to change the protocol and add two parameters at the end of the URL into the links.

Here are some existing link grabbed on various websites. The first line is the actual link, the second line is the TMUP link as it should be.

From TM-Community
```
http://www.tm-community.com/popup_dwl.php?action=dwl&id=113
tmup://www.tm-community.com/popup_dwl.php?action=dwl&id=113|PANEL|TMS
```

From TM-Exchange
```
http://sunrise.tm-exchange.com/get.aspx?action=trackgbx&id=89550
tmup://sunrise.tm-exchange.com/get.aspx?action=trackgbx&id=89550|MAP|ISLAND
```

From CarPark
```
http://www.trackmania-carpark.com/index.php?page=file&action=download&id=103
tmup://www.trackmania-carpark.com/index.php?page=file&action=download&id=103|
SKIN_3D|COAST
```

From a static hosting
```
http://www.tm-community.com/upload/kill_bill.zip
tmup://www.tm-community.com/upload/kill_bill.zip|SKIN|ISLAND
```

Remember that "#" can be used as a substitute for "|" character as parameter separator. This substitution is useful mostly on forums.

3.2. KEEPING YOUR WEBSITE USER FRIENDLY

TMUP protocol is usable only by users who have installed a specific TMUP client software. So if you provide only TMUP links, you deny access to users who haven't installed any client.

So in any case, do not replace http links by TMUP links. You should add a new link your web pages. This new links should be user friendly. TMUP specifications recommend to use "DL with TMUP".

You should also provide information about TMUP protocol by setting a link to a website where the user can find one or several compatible client. Remember that all clients do not implements all the file types.

The official web page of the TMUP protocol is :

```
http://www.tmup-links.org
```

3.3. WHICH DOWNLOAD TYPES ARE COMPATIBLES ?

Any file which is directly accessible from an absolute URL is usable to create a TMUP link. This includes the following cases :

- Direct URL

```
http://www.tm-community.com/upload/Mercedes_SL600.zip
```

The file name will be extracted from the file name present in the URL.

- Script redirection, providing the redirected link follows the same rule.

```
http://www.tm-community.com/popup_dwl.php?action=dwl&id=93
```

The file name will be extracted from the file name present in the real response URL.

- Script redirection, providing the redirected link follows the same rule

```
http://sunrise.tm-exchange.com/get.aspx?action=trackgbx&id=89540
```

The file name will be extracted from the "Content-Disposition" in the header response from the server. Please check you fill this header.

Please remember that the client will access the website using no cookies or login/password. Relative links are not supported. Each URL have to be fully qualified with protocol, address (including server parameters), file type and environments.

Warning : if the URL has parameters, you have to use the http GET method, not the http POST method. Only URL parameters are supported.

4. TMUP CLIENT SPECIFICATIONS

4.1. INTRODUCTION

The TMUP protocol is designed to be open. Providing having the technical skills, anyone can create a compatible TMUP client to download the files using those links.

Any TMUP client must have mandatory features. This is the only way to guaranty that the files are correctly handled. A client don't have to handle all file types, but it has to tell the user if the URL is malformed or if the file type is not handled by this client.

This part gives some advises on the development of a compatible TMUP downloader client software.

4.2. MANDATORY FEATURES

4.2.1. *Feature list*

A TMUP client must have those key features :

*   Display a HTML page of supported types (*see below*)
*   Intercept TMUP URLs from any web browser.
*   Understand the TMUP syntax and extract all the parameters.
*   Extract the file name from the HTTP response header.
*   Check for file name consistency with the file type.
*   Handle multiple TrackMania games.
*   Know capacities of the installed release of TM (example : 3D skins don't work on Sunrise Demo)
*   Find the full pathname using the parameters.
*   Download the file and save it in the right TM folder using the right file name.
*   Inform the user when a file type is not supported.
*   Support for both "|" ans "#" parameter separator.

4.2.2. *Feature test page*

To test the response of your client to tmup links, you should go to this web page and follow the tests. Check that you have the same results as what is written on the web page.

```
http://www.tmup-links.org/index.php?page=test
```

Please validate your client before releasing it.

4.2.3. *Technical hint – protocol and application*

Connecting a protocol to an application is quite easy. Every thing is set in the registry database. The following file is a registry export file to associate "MyApp.exe" to the TMUP protocol.

```
Windows Registry Editor Version 5.00

[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\tmup]
@="URL: tmup Protocol"
"URL Protocol"=""

[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\tmup\DefaultIcon]
@="C:\\Program Files\\TMUP\\MyApp.exe"

[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\tmup\shell]

[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\tmup\shell\open]

[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\tmup\shell\open\command]
@="\"C:\\Program Files\\TMUP\\MyApp.exe\" %1"
```

This will start the MyApp.exe each time you click on a TMUP link. You'll get the clicked URL in the command line parameter of MyApp.exe.

You might get multiple instances of your software, so you might want to find an interprocess way to do the job on only one instance. The Windows shell integrates DDE link to avoid multiple instances. Check on Internet for more information.

4.2.4. *Technical hint – Extracting all parameters*

As you get the TMUP URL in command line parameter, by DDE, or by interprocess communication, you have to extract all the parameters.

Detect if the separator is "|" or "#". Then split the URL using the used separator (| **or** #).
The first part is the HTTP URL you have to use to download the file. Replace `tmup:` by `http:` in the first four characters of the URL to obtain the effective URL to use.
Then collect all the two other Parameters. Quite easy to get.

The file name is not in the URL, you'll have to get other way. There are two possibilities :

• First try to grab it in the "Content-Disposition" RESPONSE header. Here is the syntax of this field. The file name is not URL encoded, you can use it as is. You just have to extract it from the header string.

```
Content-Disposition: attachment; filename="myfile.Gbx"
```

• Then try to get it from the right most part of the RESPONSE URI from the webserver (response URI might not be the same as the request URI in case of server redirection). You'll have to split the URI with slash character separator (/) and get the last part. Finally, you'll have to URLDecode the file name to get the real name.

4.2.5. _Technical hint – Getting legacy TrackMania installation folder_

You can get the general installation folder by reading the registry database :

Game	Registry path	Subkey	Sub Folder
TM United	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\Shell Folders	Personal	TrackMania United
TM Nations ESWC	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\TmNations_is1	Inno Setup: App Path	GameData
TM Sunrise TM Sunrise Extreme	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\TmSunrise_is1	Inno Setup: App Path	GameData
TM Sunrise Demo	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\TmSunriseDemoMag_is1	Inno Setup: App Path	GameData
TM Power-Up	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\TrackMania_is1	Inno Setup: App Path	GameData
TM Original from CD	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\TmOriginal_is1	Inno Setup: App Path	GameData
TM Original from Power-Up patch	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\TrackMania_is1	Inno Setup: App Path	GameData

Many feature are not available to TrackMania Power-Up. So it's recommended NOT to support Power-Up.

TM United folder structure has changed due to Microsoft Windows Vista compliance rules. All files must be stores in the user personal folder.

4.3. OPTIONAL FEATURES

There are many more features you can add to a TMUP client. Here are some ideas :

• Improved folder management by exploiting the files internal data and the TM file system.
• Install log to keep track of all the downloaded files
• Uninstall wizard to remove downloaded files.
• TMUP List wizard to create list of URLs
• TMUP packager wizard to create Zip packages.
• User friendly http response from server (file not found, access denied...)
• Login & password for websites which require it.

4.4. SUPPORTED TYPES HTML PAGE

Shipped with your client, you should display a web page of the supported types. A template of this HTML file is provided here. You can customize it at your convenience.

```
http://www.tmup-links.org/template/supported.html
```

Fill the page and add it to the installation program. Please make the display of this page easy to help the user. If you can display it before the installation, please don't hesitate.