

**Script Safely! You are responsible for any scripts you use. Modifying TPS values can be dangerous! Always test scripts before use.**

- Access scripting menu: Main Menu -> Utilities -> Scripting
- Record Macros by using Edit -> Add -> Enter Name -> Record
  - Easy to record and repeat repetitive commands
  - Recorded macros limited to actions you can perform with UI – does not record mouse clicks except for buttons
- Scripting Guides - <http://medphysfiles.com/index.php?name=Downloads&file=details&id=36>
- Transcripts - \$PATIENTS>/Institution\_<ID>/Mount\_0/Patient\_<ID>/Plan\_<ID>/Plan.<date>.Transcript
- Scripting Format: <Message> = <Value>;
- Comments - // This is a comment
- Variables
  - Store.FloatAt.SomeNumber = "3";
  - Store.StringAt.SomeText = "Text";
  - Store.At.SomeText.StringAppend = "Additional Text";
- Useful variables:
 

GetEnv.PATIENTS – base patient directory	PlanInfo.FirstName – Patient First Name
PatientDirectory – patient directory within base	UserName – Current logged in username
PlanInfo.MedicalRecordNumber – Patient MRN	PublicScriptDirectory – Path to public scripts
PlanInfo.LastName – Patient Last Name	
- Commands
  - Display a warning message - WarningMessage = "This is a message!";
  - Compute dose for current trial - TrialList.Current.ComputeTrialDose = "";
  - Exit Pinnacle - Quit = "";
  - Run an arbitrary command - SpawnCommand = "xclock";
  - Run an arbitrary Script - LoadNoChecksum = "TailTranscript.Script";
- Conditionals
  - IF.<value1>.<comparison>.<value2>.THEN.<message>=<value>;
  - Float Comparison – EQUALTO, NOTEQUALTO, GREATERTHAN, LESSTHAN, GREATERTHANEQUALTO, LESSTHANEQUALTO
  - String Comparison – CONTAINS, IS, ISNULL, STRINGEQUALTO, STRINGNOTEQUALTO
- Act on all elements in a list
 

```
TrialList.Current.BeamList.#"*".DoseEngine.TypeName="Adaptive Convolve";
```
- Act on each element of a list
 

```
TrialList.Current.BeamList.ChildrenEachCurrent.#"@".LoadNoChecksum = "ScriptThatActsOnEachBeam.Script";
```
- Recursive scripts (DeleteObjectives.Script):
 

```
IF.PluginManager.InversePlanningManager.CombinedObjectiveList.HasElements.THEN.
PluginManager.InversePlanningManager.DeleteCurrentObjective = "Delete Objective";
IF.PluginManager.InversePlanningManager.CombinedObjectiveList.HasElements.THEN.
LoadNoChecksum="DeleteObjectives.Script";
```

  - Use absolute path when calling other scripts - /home/p3rtp/DeleteObjectives.Script for example
- Example Pinnacle Script (TailTranscript.Script)
 

```
// Build script command
Store.StringAt.TailTranscript_TailTranscriptCmd = PublicScriptDirectory;
Store.At.TailTranscript_TailTranscriptCmd.AppendString = "/tailtrans.sh ";
Store.At.TailTranscript_TailTranscriptCmd.AppendString = GetEnv.PATIENTS;
Store.At.TailTranscript_TailTranscriptCmd.AppendString = "/";
Store.At.TailTranscript_TailTranscriptCmd.AppendString = PatientDirectory;
SpawnCommandNoWait = Store.StringAt.TailTranscript_TailTranscriptCmd;
Store.FreeAt.TailTranscript_TailTranscriptCmd = "";
```
- Example Shell Script (tailtrans.sh)
 

```
#!/bin/csh -f
set TranscriptFile = `ls -alrt $1\plan.*.Transcript | tail -1`
dtterm -e tail -f $TranscriptFile
```