

Table of Contents

Ubuntu	1
Change colors in xtrem:.....	1
bash	2
Install Packages.....	2
Backup.....	3
C++	4
root	5
Nice plots.....	5

Ubuntu

Change colors in xtrem:

```
cat /etc/X11/app-defaults/XTerm-color /etc/X11/app-defaults/XTerm > ~/XTerm
```

```
nano ~/XTerm
```

```
comment !#include "XTerm"  
add *VT100*foreground: green  
add *VT100*background: black
```

bash

Install Packages

Install both: `package_download.sh` and `expect_package_download.sh` (for this you need to have `expect` package installed).

package_download.sh

```
#!/bin/bash

this_catalog=`pwd`

echo "Remember that ATHENA environment must be set!"

if [ $# -lt 1 ]
then
    echo "Too few arguments: sh package_download.sh FILE_LIST.txt"
    exit 1
fi

if [ $# -gt 1 ]
then
    echo "Too many arguments: sh package_download.sh FILE_LIST.txt"
    exit 1
fi

echo "Write CERN username:"
read cern_username

echo "Write $cern_username@cern.ch NICE password:"
read -s cern_password

while read filename
do
    if test -d $this_catalog/$filename
    then #file exist
        rm -r -f $this_catalog/$filename
    fi

    expect expect_package_download.sh $filename $cern_username $cern_password
    cd $filename/cmt
    cmt config
    cmt make
    cd $this_catalog
done < $this_catalog/$1
```

expect_package_download.sh

```
#!/usr/bin/expect

set filename [lindex $argv 0]
set user [lindex $argv 1]
set passw [lindex $argv 2]

spawn cmt co $filename

expect "assword:"
send "$passw\r"

while { true } {
    expect {
```

bash

```

    "assword: " { send "$passwd\r" }
    "CMT" { break }
  }
}
interact

```

Sample link_file.txt:

```

ForwardDetectors/ALFA/ALFA_BeamAnalysis
ForwardDetectors/ALFA/ALFA_BeamTransport
ForwardDetectors/ALFA/ALFA_SimEv
ForwardDetectors/ALFA/ALFA_RecEv/ALFA_GloRecEv
ForwardDetectors/ALFA/ALFA_RecEv/ALFA_LocRecEv
ForwardDetectors/ALFA/ALFA_G4_SD
ForwardDetectors/ALFA/ALFA_Geometry
ForwardDetectors/ALFA/ALFA_GeoModel
ForwardDetectors/ALFA/ALFA_TestBeam
ForwardDetectors/FPTracker
ForwardDetectors/FNTracker

```

Backup

```

#!/bin/bash

# add directories that should be backedup
declare -a bcat
bcat[1]="parametryzacja"
bcat[2]="unfolding"
bcat[3]="MADX_vs_FPTrack"

echo $USER backup: $(date)
echo Making backup directory

backupcatalog="atlas_backup_$(date +%y_%m_%d)"
echo $backupcatalog
if [ -d $backupcatalog ]
  then rm -r $backupcatalog/*
  else mkdir $backupcatalog
fi

echo Copying files

i=1;
while (( $i < 4 ))
do
  find ${bcat[$i]} \( ! -name "*~" \) \( ! -name "*.pdf" \) \( ! -name "*.eps" \) \( ! -name "*"
  i=$((i+1))
done

echo Making tarball
tar -zcf $backupcatalog.tar.gz $backupcatalog

rm -r -f $backupcatalog

echo End backup

```

C++

root

Nice plots

```
TCanvas * c1 = new TCanvas("name_c1", "", 400, 400);
TH2D * h2 = new TH2D("h2", "", 100, -1., 1., 100, -1., 1.);

//***** Set margins *****
c1->SetLeftMargin(0.1);
c1->SetBottomMargin(0.11);
c1->SetRightMargin(0.12);
c1->SetTopMargin(0.05);

//***** Set number of colors in palette *****

int ncol = 10;
int colors1[ncol];
TColor *col;

double dg=1/(double)ncol;
double grey=0;
for (int i=0; i<ncol; i++)
{
    colors[i]= 2*i+ncol;
    col = gROOT->GetColor(colors[i]);
    col->SetRGB(grey, grey, grey);
    grey = grey+dg;
}
h2->SetContour(ncol);

//***** Set plot parameters *****
c1->SetFillColor(0);

h2->GetXaxis()->SetTitleSize(0.04);
h2->GetXaxis()->SetTitleOffset(1.2);
h2->GetXaxis()->SetLabelSize(0.04);
h2->GetXaxis()->SetLabelOffset(0.002);
h2->GetYaxis()->SetTitleSize(0.04);
h2->GetYaxis()->SetTitleOffset(1.2);
h2->GetYaxis()->SetLabelSize(0.04);
h2->GetYaxis()->SetLabelOffset(0.002);

h2->GetXaxis()->SetTitle("p_{T} [GeV]");
h2->GetYaxis()->SetTitle("E [TeV]");

h2->SetMaximum(1.e3);
h2->SetMinimum(1);

//***** Set style *****
TStyle * mystyle = new TStyle("mystyle", "mystyle");
mystyle->SetFillColor(0);
mystyle->SetPadColor(0);
mystyle->SetPadBorderSize(0);
mystyle->SetPadBorderMode(0);
mystyle->SetTitleFillColor(0);
mystyle->SetTitleBorderSize(0);
mystyle->SetFrameBorderMode(0);
mystyle->SetOptStat(kFALSE);
mystyle->SetPalette(ncol, colors);
mystyle->SetNumberContours(ncol);
gROOT->SetStyle("mystyle");
gROOT->ForceStyle();

//***** Legend *****
```

```
TLegend *legend = new TLegend(.40, .85, .70, .95);  
legend->AddEntry(MAD_energy_graph_2D[0][0], "MAD-X", "l");  
legend->AddEntry(FPT_energy_graph_2D[0][0], "FPTracker", "l");  
legend->SetBorderSize(1);  
legend->SetFillColor(0);  
legend->SetMargin(0.2);  
legend->SetColumnSeparation(0.);  
legend->SetEntrySeparation(0.2);  
legend->SetTextSize(0.035);  
legend->Draw();
```

This topic: [Sandbox > MaciejTrzebinskiSandbox](#)

Topic revision: r2 - 2011-01-04 - MaciejTrzebinski



Copyright &© 2008-2021 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.
or Ideas, requests, problems regarding TWiki? use [Discourse](#) or [Send feedback](#)