

Multiple output streams

As applied to the G4 Visualisation System

Vis verbosity

- Vis **verbosities** are:
Quiet
Startup
Errors
Warnings
Confirmations
Parameters
All
- The **verbosity can be set**, for example (equivalently):
 - /vis/verbose Confirmations
 - /vis/verbose confirmations
 - /vis/verbose C
 - /vis/verbose c
 - /vis/verbose 4.
- The amount of output increases with **verbosity**, e.g:

```
if (verbosity >= G4VisManager::confirmations) { ...}
```

Mapping to output streams

- It would be nice to eliminate the if statements

```
if (verbosity >=
G4VisManager::confirmations)
{
    G4cout << some
output...
```

by something much simpler, e.g:

```
G4visConfirm << some
output...
```

- G4visConfirm is an object that is aware of the vis verbosity and uses G4cout, G4warn, etc., as appropriate.
- The colours are suggestions for HTML-aware sessions, e.g., G4UIQt
- Genuine errors will use G4Exception

verbosity >=	Object	Replace if verbosity >= "column 1" by
Quiet	N/A	N/A
Startup	G4visStartup	G4cout
Errors	G4visError	G4warn
Warnings	G4visWarn	G4warn
Confirmations	G4visConfirm	G4cout
Parameters	G4visParam	G4cout
All	G4visAll	G4cout