Config files

DSX configuration is done through dedicated configuration files. The following files are evaluated in order:

- `$DSX_DIR/etc/dsx.conf`

Default config, system wide.

- `~/.dsx.conf`

In your home dir, default config, user wide

- `./dsx.conf`

Setup for current directory / project.

Syntax

Config files have an "ini-like" syntax, much like windows ini files.

```
# Comment
; Another commentaire
[section]
key1 = value1
key2 = value2
key3 = multi-line
   value, subsequent lines to
   concatenate must begin with a
   whitespace character.

[another-section]
key = val
```

Parser has a great feature: it may extend contents of a variable within another with %(variable-name)s syntax:

```
[calc]
oper = 2x3
result = 6
long = the expression %(oper)s equals %(result)s
short = %(oper)s = %(result)s
```

DSX' interpretation

Section [defaults] describes sections to look at for project parts:

```
[defaults]
soclib = soclib-exemple
systemc = systemc-exemple

[systemc-exemple]
dir = /users/exemple/systemc-2.1.0
os = linux

[soclib-exemple]
dir = /users/exemple/soclib
```

This makes it easier to switch between different concurent configurations

Sections to fill

DSX config defines paths for your actual system configuration

- Compilation options and paths for SystemC, SystemCASS or any other SystemC implementation
- Path to SoCLIB
- Paths and prefixes to cross compilation software suite

SystemC, SystemCASS

Mandatory configuration items for SystemC implementation are:

- `nickname`

  Type of implementation, possible values are: systemc, systemcass.

- `cflags`

  Additionnal compile-time arguments, typically include paths, -W options, ...

- `libdir`

  Additionnal link-time arguments, typically library paths

- `libs`

  Libraries

- `cxx`

  C++ compiler, default is g++.

Example:

```
[systemcass-labo]
; Globally substitued variables
dir=/users/outil/systemc/systemcass/systemcass/latest
os=i686-Linux.SLA4x

; Generic declaration
nickname=systemcass
cflags=-I%(dir)s/include -O3 -rdynamic
libdir=%(dir)s/lib-%(os)s
libs=-lsystemc -ldl -rdynamic
cxx=g++
```

Cross compilers

Options:

- `cc-prefix`

  Prefix for tools' names

- `cc-cflags`

  Additionnal compile time flags

Example:

```
[mipsel]
cc-prefix=mipsel-unknown-elf-
cc-cflags=-O2 -Wall

[ppc]
cc-prefix=/usr/local/cctools/ppc/bin/ppc-unknown-elf-
cc-cflags=-O2 -Wall
```