

Debug STL with Pretty Printer

centos6 centos7

```
gdb STL print
string bitset pair tuple unique_ptr share_ptr map set list vector any optional C++17
map<int,string>, string
```

00000000

```
#include <map>
#include <iostream>
#include <string>
#include <vector>
#include <set>
#include <list>
```

```
using namespace std;
```

```
int main() {
    std::map<string, string> lm;
    lm["good"] = "hearta===== ";
    lm["ok"] = "heartooooooooo===== ";
}
```

```
std::cout<<lm["good"];
std::map<int, int> mi;
mi[0]=12;
```

```
std::vector<int> v{1,2,3,4};
v[1] =12;
list<int> ll{1,2,3,4,5,6};
string ss = "asddffgh";
set<int> se{1,2,5,6};
return 0;
```

```
debug map lm p lm
```

[illegible]

```
ss print ss
```

```
(gdb) p ss
$2 = {
  static npos = 18446744073709551615,
  _M_dataplus = {
    <std::allocator<char>> = {
      <_gnu_cxx::new_allocator<char>> = {<No data fields>}, <No data fields>},
      members of std::__cxx11::basic_string<char, std::char_traits<char>, std::allocator<char> >::_Alloc_hider:
        _M_p = 0x7fffffff540 "afdsfgsgsdf"
    }
  },
  _M_string_length = 11,
  {
    _M_local_buf = "afdsfgsgsdf\000=\000\000",
    _M_allocated_capacity = 7454414402731927137
  }
}
du@shavm0721 ~/.scripts/python/gdb8 $ cd ../
du@shavm0721 ~ $ makefile.in* vdu/
du@shavm0721 ~/.scripts/python/gdb8 $ rm -f libstdcxx
du@shavm0721 ~/.scripts/python/gdb8 $ ls
libstdcxx_bak/  Makefile.in*  vdu/
du@shavm0721 ~/.scripts/python/gdb8 $
```

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`00000000 GDB 00STL000000000000000000000000`

```
std::map
```

```
(gdb) p lm
$1 = std::map with 2 elements = {
  ["good"] = "hearta", '=' <repeats 37 times>,
  ["ok"] = "heartoooooooo", '=' <repeats 37 times>
}
```

1111

▣ ▣ .gdbinit

centos6 安装 gcc 编译选项 -fcommon 编译选项

```
source /home/zjdu/.scripts/python/gdb8/gdb8.sh
```

000000\ .gdbinit \000000

```
set print pretty on
set print object on
set print static-members on
set print vtbl on
set print demangle on
set demangle-style gnu-v3
set print sevenbit-strings off

source /home/zjdu/.scripts/python/gdb8/gdb8.sh

.gdbinit" 56L, 2144C written
```

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gdb

```
std::list
```

```
(gdb) p ll
$1 = std::__cxx11::list = {
  [0] = 1,
  [1] = 2,
  [2] = 3,
  [3] = 4,
  [4] = 5,
  [5] = 6
}
```

```
std::vector
```

```
(gdb) p v
$2 = std::vector of length 4, capacity 4 = {1, 12, 3, 4}
```

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