Insights Workshop *Cheat Sheet*

Insights Components

Spec Factory Methods

Methods

- simple_file	- Reads a file at a given path
- simple_command	- Results of a command that has no dynamic arguments
- glob_file	- Reads all files matching a glob pattern
- first_file	- First readable file in a list
- listdir	- Directory listing at a given path
- foreach_execute	- Executes a command for each element provider. Provider is the output of a different datasource that returns a list of single elements or a list of tuples.
- foreach_collect	- foreach_collect substitutes each element in provider into path and collects the files at the resulting paths.
- first_of	- first_of returns the first of a list of dependencies that exists. At least one must be present, or this component won't fire.

Examples

```
insights.core.spec_factory.simple_file():
  auditd_conf = simple_file("/etc/audit/auditd.conf")
  audit_log = simple_file("/var/log/audit/audit.log")
```

```
insights.core.spec_factory.simple_command()
  blkid = simple_command("/sbin/blkid -c /dev/null")
  brctl_show = simple_command("/usr/sbin/brctl show")
```

```
insights.core.spec_factory.glob_file()
  httpd_conf = glob_file(["/etc/httpd/conf/httpd.conf",
   "/etc/httpd/conf.d/*.conf"])
  ifcfg = glob_file("/etc/sysconfig/network-scripts/ifcfg-*")
  rabbitmq_logs = glob_file("/var/log/rabbitmq/rabbit@*.log",
   ignore=".*rabbit@.*(?<!-sasl).log$")
```

```
insights.core.spec_factory.first_file()
  meminfo = first_file(["/proc/meminfo", "/meminfo"])
  postgresql_conf = \
  first_file([ "/var/lib/pgsql/data/postgresql.conf" ,
   "/opt/rh/postgresql92/root/var/lib/pgsql/data/postgresql.conf"  ,
   "database/postgresql.conf"  ])
```

Insights Components (cont)

Examples

```
insights.core.spec_factory.listdir()
  block_devices = listdir("/sys/block")
  ethernet_interfaces = listdir("/sys/class/net",
   context=HostContext)
```

```
insights.core.spec_factory.foreach_execute()
  ceph_socket_files = listdir("/var/run/ceph/ceph-*.*.asok",
   context=HostContext)
  ceph_config_show = foreach_execute(ceph_socket_files,
   "/usr/bin/ceph daemon %s config show")
  ethernet_interfaces = listdir("/sys/class/net",
   context=HostContext)
  ethtool = foreach_execute(ethernet_interfaces,
   "/sbin/ethtool%s")
```

```
insights.core.spec_factory.foreach_collect()
  httpd_pid = simple_command("/usr/bin/pgrep -o httpd")
  httpd_limits = foreach_collect(httpd_pid, "/proc/%s/limits")
  block_devices = listdir("/sys/block")
  scheduler = foreach_collect(block_devices,
   "/sys/block/%s/queue/scheduler")
```

```
insights.core.spec_factory.first_of()
  postgresql_log =
   first_of([glob_file(
           "/var/lib/pgsql/data/pg_log/postgresql-*.log"),
          glob_file("/opt/rh/postgresql92/root/" \
           "var/lib/pgsql/data/pg_log/postgresql-*.log"),
          glob_file("/database/postgresql-*.log")])
  systemid = first_of([simple_file("/etc/sysconfig/rhn/systemid"),
           simple_file("/conf/rhn/sysconfig/rhn/systemid")])
```