```
1d0
< import re
< #import configobj as ConfigObj</pre>
23d20
< #from tyworkflow.resource_manager.client_util import DB</pre>
26d22
< TYUT_PATH = os.path.join(TYROOT, 'media', 'tyutils', 'leafbag', 'tyutils')
< sys.path.append(os.path.join(os.path.dirname(TYROOT), 'tyutils', 'src'))</pre>
36c31
< from tyutils.resource_utils import get_computer_name, get_esxi_host_info,</pre>
set_resource_fubar, get_resource_mac
> from tyutils.resource_utils import get_computer_name, get_esxi_host_info,
set_resource_fubar
41,43d35
< # local USB info file</pre>
< USB_INFO = os.path.join(TYUT_PATH, 'usb_info')
46,47c38,39
< WAIT_INTERVAL_SEC = 5
< MOUNT_TIMEOUT_MIN = 1
> WAIT_INTERVAL_SEC = 5
> MOUNT_TIMEOUT_MIN = 1
69,72c61,64
      osfam = host.get_os_family()
<
<
      if osfam == constvalueWindows:
<
<
          drives = _win_list_drives(host)
- - -
      drives = []
>
>
      for c in string.lowercase:
          if host.execfunc('os.path.isdir', c+':'):
>
               drives.append(c)
79,84d70
<
<
          temp = usb.split(os.path.sep)
<
          usb_{ip} = temp[0]
<
          for item in temp:
<
               if not (usb_ip == item):
                   usb_ip = usb_ip + '.' + item
<
100c86
<
      max_try_count = 10
>
      max_try_count = 3
102d87
      rv_drive = None
123,125d107
                   host.log.info('[usb_utils:setup_usbs]','May need to physically
reset', usb)
<
                   host.log.info('[usb_utils:setup_usbs]','Setting',usb_ip,'fubar.')
<
                   set_resource_fubar(usb_ip)
138a121,122
              arch = host.get_os_family()
166c150
               if osfam == constvalueLinux:
```

```
if arch == constvalueLinux:
>
187a172
                  #host.log.debug('mount result',rv)
189c174
              elif osfam == constvalueWindows: #for windows
              else: #for windows
193,204c178,192
                  while rv_drive is None and now < timeout:
<
<
                       for cdrive in _win_list_drives(host):
<
                           if cdrive not in drives:
<
                               rv drive = cdrive
<
                               break
<
                           else:
<
                               time.sleep(WAIT_INTERVAL_SEC)
<
                               now = time.time()
<
<
                  #try again if we didn't get a drive yet (means we hit a timeout)
<
                  try_again = (rv_drive is None)
<
>
                  while now < timeout:
                       new_drives = []
>
                       time.sleep(WAIT_INTERVAL_SEC)
>
>
                       for c in string.lowercase:
>
                           if host.execfunc('os.path.isdir', c+':'):
>
                               new_drives.append(c)
                       if len(new_drives) > len(drives):
>
                           try_again = False
>
>
                           break
>
                       else:
                           new_drives = []
>
>
                           try_again = True
>
>
                       now = time.time()
>
207,209c195,199
<
              else:
<
                  raise Exception('OS family %s not supported' % osfam)
<
                  rv_drive = None
>
>
                  for drive in new_drives:
>
                       if not (drive in drives):
                           rv_drive = drive+':'
>
>
                           break
216c206
              disconnect_usb(host, usb, vmname=vmname)
<
              disconnect_usb(host, usb)
>
220,222c210,211
      set_resource_fubar(usb_ip)
<
      host.log.error('[usb_utils:connect_usb] After',max_try_count,'tries, the USB
was still not connected. Going to skip and mark as fubar.')
      return False, ''
<
- - -
      host.log.error('[usb_utils:connect_usb] After',max_try_count,'tries, the USB
>
was still not connected. Going to skip.')
```

```
return False
241a231,234
      drives = []
      for c in string.lowercase:
>
          if host.execfunc('os.path.isdir',c+':'):
>
              drives.append(c)
304c297
          if not connUSB_rv[0]:
<
- - -
          if connUSB_rv == False:
>
311,314c304
          host.log.info('[usb_utils:setup_usbs before]',walkDir_rv)
<
<
          host.log.info('[usb_utils:setup_usbs] nuking the USB filesystem...')
<
          usb_remove_all(host, connUSB_rv[1])
<
          host.log.debug('[usb_utils:setup_usbs]',walkDir_rv)
>
327c317,319
              host.log.error('[usb_utils:setup_usbs] USB Blueprint does not exist
<
for USB', usb)
              host.log.error('[usb utils:setup usbs] USB Blueprint does not exist
>
for USB', usb, '!!!!')
              host.log.info('[usb_utils:setup_usbs]','Setting',usb_ip,'fubar.')
>
              set_resource_fubar(usb_ip)
329,342c321,322
              host.log.info('[usb_utils:setup_usbs] Attempting to create new
blueprint...')
<
              usb_remove_all(host, connUSB_rv[1])
<
              new_walk = walk_directory(host, connUSB_rv[1])
<
              host.log.info('[usb_utils:setup_usbs] Creating new blueprint...')
<
<
              blueprint_path = create_usb_blueprint(host, connUSB_rv[1], new_walk)
<
              time.sleep(20)
              walkDir_rv = walk_directory(host, connUSB_rv[1])
<
              remove_list, compare_pb_rv = compare_usb_blueprint(host,
<
connUSB_rv[1], walkDir_rv, remove_list)
<
              # host.log.info('[usb_utils:setup_usbs]','Setting',usb_ip,'fubar.')
<
<
              # set_resource_fubar(usb_ip)
              # _disconnect_usbs_still_connected(host,usbs)
<
              # raise Exception('Was unable to connect usb '+ str(usb)+ ' to
computer ' + str(host) + ' for some reason.')
              _disconnect_usbs_still_connected(host,usbs)
>
              raise Exception('Was unable to connect usb '+ str(usb)+ ' to computer
' + str(host) + ' for some reason.')
349,354c329,332
                      host.log.error('[usb_utils:setup_usbs]','Failed to
remove:',File,'from USB:',usb,'---FUBAR---')
                      #host.log.error('[usb_utils:setup_usbs]','Failed to remove
non-default file during USB cleanup. Marking USB',
<
                           usb, 'as FUBAR and stopping test')
<
#host.log.info('[usb_utils:setup_usbs]','Setting',usb_ip,'fubar.')
                      #set_resource_fubar(usb_ip)
                      host.log.info('[usb_utils:setup_usbs]', 'Failed to remove non-
default file during USB cleanup on USB: ', usb, 'But NOT MARKING FUBAR')
```

```
host.log.error('[usb_utils:setup_usbs]','Failed to remove
non-default file during USB cleanup. Marking USB',
                           usb, 'as FUBAR and stopping test')
>
host.log.info('[usb_utils:setup_usbs]','Setting',usb_ip,'fubar.')
                      set_resource_fubar(usb_ip)
358,360d335
          walkDir_rv = walk_directory(host, connUSB_rv[1])
<
<
          host.log.info('[usb_utils:setup_usbs after]',walkDir_rv)
<
404c379
< def check_usb_blueprint(host, directory, rcfile=USB_RC_FILENAME):
> def check_usb_blueprint(host, directory):
419,430c394,401
<
      for x in range(0,3):
<
          try:
              bp_file = host.mirrorfunc('open', directory+host.sep()
<
+USB_BLUEPRINT_RC, 'rb')
              host_p.readfp(bp_file)
<
<
              break
<
          except Exception, ex:
<
              raise Exception('Error reading '+ USB_BLUEPRINT_RC)
<
          finally:
<
              if bp_file:
<
                  bp_file.close()
<
              time.sleep(3)
      try:
>
          bp_file = host.mirrorfunc('open', directory+host.sep()
>
+USB_BLUEPRINT_RC, 'r')
          host_p.readfp(bp_file)
>
      except:
>
          raise Exception('Error reading '+ USB_BLUEPRINT_RC)
>
>
      finally:
          if bp_file:
>
              bp_file.close()
>
436c407
<
      usb_p = util.read_config(rcfile)
      usb_p = util.read_config(USB_RC_FILENAME)
>
509c480
                      #host.log.error('[usb_utils:compare_usb_blueprint]
Exception', str(ex))
                      host.log.error('[usb_utils:compare_usb_blueprint]
Exception',str(ex))
549,596d519
< def usb_remove_all(host, directory):
<
<
      host.log.info('[usb_utils:usb_remove_all] Attempting to format USB')
<
<
      try:
<
          # usestr should be the drive letter string
<
          usestr = directory.upper()
<
<
          # write a test file to the USB
          cmd = ['echo','"This is a test of the USB deletion system. This is only a
<
```

```
test."','>',usestr+'usbtest.txt']
          host.execcmd(*cmd, shell=True, wait=True)
<
<
          # show the USB contents with test file
<
          walkDir_rv = walk_directory(host, directory)
<
<
          host.log.info('[usb_utils:usb_remove_all]',walkDir_rv)
<
          # windows
<
<
          if host.get_os_family() == constvalueWindows:
              host.log.info('[usb_utils:usb_remove_all] Reformatting drive on
<
windows')
              cmd = ['format','/q','/x','/v:thumbdrive',usestr]
<
<
              rv = host.execcmd(*cmd, shell=True, wait=True)
<
              time.sleep(5)
              #(stdout, stderr) = rfmt.communicate(raw_input("\r\n"))
<
<
              #host.log.info('Output: stdout %s --- stderr %s' % (stdout, stderr))
<
          # linux
<
          elif host.get_os_family() == constvalueLinux:
<
              host.log.info('[usb_utils:usb_remove_all] Recursively deleting all
<
USB contents via linux cli')
              cmd = ['rm', '-rf', directory]
<
              host.execcmd(*cmd, wait=True)
<
<
<
          # confirm tha the usbtest.txt file is gone
          walkDir_rv = walk_directory(host, directory)
<
          host.log.info('[usb_utils:usb_remove_all]',walkDir_rv)
<
          if 'usbtest.txt' in walkDir_rv.values()[0]:
<
              host.log.info('[usb_utils:usb_remove_all] USB cleanup failed,
usbtest.txt is present')
              #_disconnect_usbs_still_connected(host,usbs)
<
              raise Exception('USB Error: Did not remove usbtest.txt')
<
<
          host.log.info('[usb_utils:usb_remove_all] USB clean: usbtest.txt is
<
gone.')
<
<
      except Exception, e:
          host.log.info('[usb_utils:usb_remove_all] failed: %s' % str(e))
<
<
<
<
<
      return
628,647d550
< def get_usb_serial( usb, rcfile=USB_INFO):
<
      #cfg = util.read_config(rcfile)
<
      #usb = cfg.getdict('usb','usb')
<
      #usb_deviceid_map = cfg.getdict('usb', 'usb_deviceid_map')
<
<
      #cfg = ConfigObj.ConfigObj(rcfile)
<
      #usb = cfg['usb']['usb_map']
<
      cfg = ConfigParser.ConfigParser()
<
      cfg.read(rcfile)
<
      usb_deviceid_map = cfg._sections['usb_deviceid_map'] #cfg['usb']
<
['usb_deviceid_map']
<
<
      mac = get_resource_mac( usb.replace('/', '.') )
      if mac:
<
```

```
usb_id = mac[-2:]
<
          return usb_deviceid_map.get( usb_id, None )
<
<
      else:
<
          return None
<
<
665,689d567
< def _win_list_drives(host):
<    """Lists the drive letters present on a Windows host."""</pre>
<
      dlist = host.execfunc('exec',
           'import win32com.client',
<
           'import pythoncom',
<
           'pythoncom.CoInitialize()',
<
           'objWMIService = win32com.client.Dispatch("WbemScripting.SWbemLocator")',
<
           'objSWbemService = objWMIService.ConnectServer(".", "root/cimv2")',
<
           'lvs = objSWbemService.ExecQuery("SELECT Name FROM Win32_LogicalDisk")',
<
           'return [lv.Name.lower() for lv in lvs]'
<
<
      )
<
<
      return convertToAscii(dlist)
<
< def convertToAscii(ustr):
      """Converts unicode strings/dictionaries/lists to ascii"""
<
      if isinstance(ustr, dict):
<
          return dict((convertToAscii(key), convertToAscii(value)) for key, value
<
in ustr.iteritems())
      elif isinstance(ustr, list):
<
          return [convertToAscii(element) for element in ustr]
<
      elif isinstance(ustr, unicode):
<
          return ustr.encode('utf-8') # encodes same values as ascii, won't throw
exception if not ascii
      else:
<
<
          return ustr
```