

System Information Check

Summary

It is to check the system properties information including the Processor ID, Operating System (OS), Memory and Disk (HDD).

This function is included in the Egovframework common component element technology.

Description

- ① Function to get the system Processor ID (CPU ID)
- ② Function to get the system OS information
- ③ Function to get the system memory capacity information
- ④ Function to get the system disk information

Related Sources

Type	Corresponding Sources	Description	Remarks
Service	egovframework.com.utl.service.EgovSysInfo.java	An element technology class on checking system information	
JSP	WEB_INF/jsp/egovframework/cmm/utl/EgovSysInfo.jsp	A test page	

Method

Output	Method	Description	Details
String	getProcessorID()	Processor ID Inquiry	Returns the system Processor ID
String	getHostName()	Host Name Inquiry	Returns the system Host Name
String	getOSName()	OS Name Inquiry	Returns the system OS Name
String	getOSVersion()	OS Version Inquiry	Returns the system OS Version
String	getOSPrductor()	OS Producer Inquiry	Returns the system OS Producer
float	getMoryFullCpcty()	Full Memory Capacity Inquiry	Returns the full memory capacity of system
float	getMoryUsedCpcty()	Used Memory Capacity Inquiry	Returns the used memory capacity of system
float	getMoryFreeCpcty()	Service(Free) Memory Capacity Inquiry	Returns the Service(free) memory capacity of system
ArrayList	getDiskName()	Disk List Inquiry	Returns the system disk list
float	getDiskFullCpcty()	Full Disk Capacity Inquiry	Returns the full disk capacity of system
float	getDiskUsedCpcty()	Used Disk Capacity Inquiry	Returns the used disk capacity of system
float	getDiskFreeCpcty()	Service(Free) Disk Capacity Inquiry	Returns the Service(free) disk capacity of system

Input

Output

- String type Host Name (ex. WAS)
- String type OS Name (ex. AIX)
- String type OS Version (ex 5.3.0.0)
- String type OS Producer (ex. IBM,8204- E8A)
- String type Processor ID (ex. 0B0AA2)
- String type Disk Name (ex. hdisk0| hdisk1| hdisk2| hdisk3)
- String type Full Disk Capacity (MB) (ex. 851456.0)
- String type Used Disk Capacity (MB) (ex. 700160.0)

- String type Service(Free) Disk Capacity (MB) (ex. 151296.0)
- String type Full Memory Capacity (MB) (ex. 18601.5)
- String type Used Memory Capacity (MB) (ex. 15744.2)
- String type Service(Free) Memory Capacity (MB) (ex. 2857.3)

Environmental Settings

- server.properties

1. Shell script to inquire Processor ID and OS Information

SHELL.WINDOWS.getOSInfo = C:/Documents and Settings/Administrator/egovProps/prg/getOSInfo.bat

SHELL.UNIX.getOSInfo = /product/jeus/egovProps/prg/getOSInfo.sh

2. Shell script to inquire Memory Information

SHELL.WINDOWS.getMoryInfo = C:/Documents and Settings/Administrator/egovProps/prg/getMoryInfo.bat

SHELL.UNIX.getMoryInfo = /product/jeus/egovProps/prg/getMoryInfo.sh

3. Shell script to inquire Disk Information

SHELL.WINDOWS.getDiskInfo = C:/Documents and Settings/Administrator/egovProps/prg/getDiskInfo.bat

SHELL.UNIX.getDiskInfo = /product/jeus/egovProps/prg/getDiskInfo.sh

- getOSInfo.bat (Windows OS Information Inquiry Script)

systeminfo

- getOSInfo.sh (Unix OS Information Inquiry Script)

echo \$1 - SEARCH NAME (NAME, VERSION, PRDUCTOR)

NAME

if [\$1 == "NAME"]

then

 uname - s

fi

VERSION

if [\$1 == "VERSION"]

then

 oslevel

fi

PRDUCTOR

if [\$1 == "PRDUCTOR"]

then

 prtconf | grep "System Model:" | awk '{print \$3}'

fi

PROCESSOR

if [\$1 == "PROCESSOR"]

then

 uname - a | awk '{print substr(\$5,3,6)}'

fi

- getMoryInfo.bat (Windows Memory Information Inquiry Script)

systeminfo

- getMoryInfo.sh (Unix Memory Information Inquiry Script)

echo \$1 - SEARCH NAME (FULL, USING, VALID)

```

# FULL
if [ $1 == "FULL" ]
then
    vmstat | grep "mem=" | awk '{print $4}'
fi

# USING
if [ $1 == "USED" ]
then
    vmstat | tail - 1 | awk '{print $3*4096/1024/1024}'
fi

# VALID
if [ $1 == "FREE" ]
then
    vmstat | tail - 1 | awk '{print $4*4096/1024/1024}'
fi

```

- getDiskInfo.bat (Windows Disk Information Inquiry Script)

Disk information is not available in the Windows system.

- getDiskInfo.sh (Unix Disk Information Inquiry Script)

```
# echo $1 - SEARCH NAME (NAME, FULL, USING, VALID)
```

```

# NAME
if [ $1 == "NAME" ]
then
    lspv | awk '{print $1}'
fi

```

```

# FULL
if [ $1 == "FULL" ]
then
    lspv $2 | grep "TOTAL PPs" | awk - F("(" '{print $2}' | awk '{print $1}'
fi

```

```

# USING
if [ $1 == "USED" ]
then
    lspv $2 | grep "USED PPs" | awk - F("(" '{print $2}' | awk '{print $1}'
fi

```

```

# VALID
if [ $1 == "FREE" ]
then
    lspv $2 | grep "FREE PPs" | awk - F("(" '{print $2}' | awk '{print $1}'
fi

```

Manual

```

import egovframework.com.utl.sim.service.EgovSysInfo;

// 1. Host Name, OS Name, OS Version, OS Producer, Processor
hostname = EgovSysInfo.getHostName();
osname = EgovSysInfo.getOSName();

```

```
osversion = EgovSysInfo.getOSVersion();
osprductor = EgovSysInfo.getOSPrductor();
processor = EgovSysInfo.getProcessorID();

// 2. Memory Capacity
moryUsed = EgovSysInfo.getMoryUsedCpcty();
moryFree = EgovSysInfo.getMoryFreeCpcty();
moryFull = EgovSysInfo.getMoryUsedCpcty();

// 3. Disk Capacity
ArrayList list = EgovSysInfo.getDiskName();
for(int i = 0; i < list.size(); i++) {
    diskName += (String)list.get(i) + " | ";
    diskFull += EgovSysInfo.getDiskFullCpcty((String)list.get(i));
    diskUsed += EgovSysInfo.getDiskUsedCpcty((String)list.get(i));
    diskFree += EgovSysInfo.getDiskFreeCpcty((String)list.get(i));
}
```

References

N/A