

WINDOWS 10 ROLL OUT

INTRODUCTION

The SAC campus migration to Windows has been started in Spring 2016 and was planned to be completed at the end of Fall 2016.

The Deans were approached as new computers were installed and when possible Windows 10 was rolled out with every new computer that was installed on campus whether on the instructional or faculty/staff side.

It is important to understand that due to the nature of the change to Windows 10 the computers have to be reimaged completely and each area has its particular image with specific software that has to be tested and deployed. This means a certain amount of time has to be devoted to preparing and then rolling out in each area.

There were several items of note, in particular the legacy software and older computers that are being used on campus that proved a barrier to several areas adopting Windows 10. This report outlines the classrooms and labs with the new Windows 10 image. The spread of variety of software and the silos that exist with different divisions being on different software the Windows 10 migration has been a complicated move for SAC.

Windows 10 Status Report

ITS has had partial success in completing this project. The following section in the report outlines the classrooms and labs with the new Windows 10 image that have been completed. N side staff and faculty computers are also progressing one by one.

SAC Site:

A Building

Labs: A225, A209, A211, A104, A106

Classrooms: A206, A208, A213, A215, A222, A224, A226, A228, A214, A216, A203, A205, A207,

B Buildings

CEC at SAC Classrooms: B29, B30, B31, B33

C Building

C building is in progress, instructor stations are old need replacing

D Building

Labs: D301, D306, D307 completed D401 and D434 are in progress

Classrooms: Still in progress

E Building

To be planned

F Building

To be planned

G Building

To be planned

H Building

Labs: H210 software incompatible with Win 10 unable to upgrade

I Building

Labs: completed

Classrooms: completed I 101, I 102, I 103, I 104, I105, I106, I107, 108 and I 201, I202, I203, I 204, I205, I206, I207, I208)

J Building

To be planned

K Building

To be planned

L building:

Library - 1st Floor: L112-1

2nd Floor: L204, L205, L206, L207 Mesa, L220, L221, L222, L225

M Building

To be planned

N Building

To be planned

P Building

To be planned

R Building

Classrooms: R303, R207

S Building:

S107 Adelante

T Building

To be planned

V- Village Buildings

To be planned

CEC Site

Centers: Corbin Center

E Building

Labs: E108 and E109 New computers are coming in E108/109. These will be Win 10

Classrooms:

A Building

All rooms completed (A114

B Buildings

All rooms completed (B107, B109, B110

D Building

D-101, D-102, D-104, D-107, D-108, D-110, D-111, D-112 completed

Computers in D107, D108, D110, D112 are old an have Windows 7 (Optiplex 745)

E Building

E-101, E-110, E-111

F Building

F-101, F-102, F105, F106, F100, F105, F123, F124, F125

G Building

G105

W Building

W102

REMARKS AND ISSUES

Unfortunately, the projected timeline planned for was too optimistic as there were too many issues that stood in the way of completion.

The main issues that stood in the way of completion:

1. Old hardware that was unable to sustain Win 10 image and run it in a timely way.

2. Software being used in several areas was not compatible or too old to run on Win 10.
3. Access to areas – lack of access due to classes being back to back in many areas
4. Lack of IT technicians – we urgently need more feet on the ground to be able to image, test and deploy the Win 10 software. With current requests or support, there is not enough time for the techs to roll out such a big system change in a timely manner.
5. Moves and constant locations change around the SAC site- not only is construction causing constant moves but there is a continuous stream of new computers that we have to work at installing as well

CONCLUSION

The Windows 10 roll out will take more time than was initially projected as several areas need newer computers to be able to sustain the change and several other areas need to find updated programs that will work on Windows 10 .

Another latest item to note is that windows 10 has enforced updates from Microsoft. Thus even after reimaging ITS found that the computers self-updated to Anniversary versions and corrupted our student profiles making ITS have to redo their work on the Windows 10 images.

Santa Ana College

Technology Upgrade Planning 2016-2021

Draft

ITS Budget

- ▶ The total ITS budget from DO is \$200,000 and is split 70/30.
 - ▶ SAC - \$140,000
 - ▶ SCC - \$60,000
- ▶ Additional funds to SAC for Engineering lab \$50,000
- ▶ Additional 50 computers for Windows 10 deployment from district

New Technology Costs

- ▶ Current HP ProBook 470 G4 Notebook(i7 core) Laptop with 5 year warranty costs about \$1000
- ▶ HP Elitedesk 800 Desktop Computer with E232 23" LED LCD Monitor and peripherals and 5 year on site warranty - standard configuration is \$1015
- ▶ Lockdowns are approximately \$35 per computer
- ▶ Power, network and cabling depends on existing
- ▶ Networking costs about \$350 per new drop

Windows Computers

AREA	COMPUTERS
SAC I-SIDE	1559
SAC N-SIDE	798
CEC	424
DMC	74
Sheriff Academy	14
Delhi	25
Corbin Center	20
OC Jail	25
Sac B21 from Washington Elementary	10
Esqueda Elementary	11
SER	30
Santa Ana Senior Center	19
Child Dev East	4
Occtac (Orange County Children therapeutic Art Center)	19
Santa Ana Public Library	3
Fire Tech Huntington Beach	3
TOTAL	3038
Digital Dons at SAC- HP 2-in-1	1100
TOTAL Windows devices	4138

Mac Computers and iPads

OTHER: Types of Mobile devices	Number of mobile devices
SAC iPads	536
CEC iPads	100
TOTAL iPads	636
Apple Mac -still being counted	
Macs at DMC Fine Arts lab	51
*Music Room Mac	20
Fashion T213 Building Macs	20
Macs in A building - A219/217	42
Macs in N building- Music room	7
L Building - publications L119	3
Macs in AV media office	4
TOTAL Apple Devices	149

The Larger Picture

- ▶ Total Computers and Tablets - 5072
- ▶ Total Windows Instructional Computers out of Warranty (old need replacement) - 683, Faculty and staff - 200 estimated
- ▶ Total printers - 305, 283 are owned by us (count under progress)
- ▶ Mac Computers needing replacement at least 63(count under progress)

Years past Warranty	SAC i-Side Computer Numbers	CEC i-Side Computer Numbers
1	15	1
2	55	35
3	73	53
4	45	32
5	220	42
6	115	0
11	2	0
TOTAL COMPUTERS OUT OF WARRANTY I SIDE	525	163

This does not include iPads, Surface Pro that are now getting old.

Faculty and Staff

- ▶ Total of 798 computers
- ▶ About a third were too old for Windows 10 (moving target snapshot Sept 2016)
- ▶ We are replacing as we roll out Windows 10
- ▶ 50 computers are in the process of being replaced by Fall 2017
- ▶ New faculty are getting new computers allocated from DO
- ▶ New staff are getting what the department allocates
- ▶ Surface Pro and iPads are becoming very popular

Next 5 Years Projected Figures

-These are Estimates

Instructional

Year to replace	SAC Computer Numbers	CEC Computer Numbers	TOTALS
2016	68	0	68
2017	70	145	215
2018	39	118	157
2019	450	33	483
2020	111	6	117
2021	207	0	207

Faculty and Staff

Year to replace	Number of Computers
2016	70
2017	150
2018	150
2019	220
2020	100
2021	100

How Many Computers Need Replacing

Year by which Computer Replacements are Due	Number of Computers (CEC and SAC)	Total Windows Computers
2016	68 + 70 + 688(already out of warranty)	826
2017	215 + 150	365
2018	157 + 150	307
2019	483 + 220	703
2020	117 + 100	217
2021	207 + 100	307

Costs of Windows Replacement

Year by which Computer Replacements are Due	Total Computers	Computer Replacement Costs Estimated @1100
2016	826	\$908600
2017	365	\$401500
2018	307	\$337700
2019	703	\$773300
2020	217	\$238700
2021	307	\$337700

Budget to replace obsolete windows computers spread evenly over next 5 years - \$599500
District portion 2016 - \$200,000 was designated and spent (\$140,000 has been given for us to prioritize and an additional \$60,000 was spent on faculty computer replacements and helping replace Engineering lab computers

Other replacement Costs

- ▶ Printers can be varied prices \$300-\$5000 Classroom printers average \$900 replacing 50 printers a year would take us to a 6 year cycle.
- ▶ Printers \$45000 per year
- ▶ iMacs cost about \$1400, Mac pro \$4600
- ▶ iPads Cost range from \$900- \$5000
- ▶ Newer model iPad Air 2 costs \$4750 with 3 year Applecare
- ▶ Surface Pro 4 educational bundle costs \$1000- \$1300
- ▶ Estimated totals for iPads and Macs out of warranty per year \$200,000
- ▶ Mobile devices life -Two years
- ▶ To keep up dated, estimated total of \$840,000

Points to Ponder

- ▶ This year 826 computers need replacing
- ▶ The large number that need replacing straightaway means we may need to spread the purchases
- ▶ Deciding Priorities
- ▶ Future one time funds purchases
 - ▶ Grants and one time funds need to include support and maintenance
 - ▶ Silos in purchasing we need to leverage larger numbers
 - ▶ There needs to be a funded plan for replacing
- ▶ Current Macs versus PC asset inventory
- ▶ Going mobile - 2 year planning
- ▶ Support of variety and numbers

Some Possible Solutions

- ▶ Inventory, MDM program such as AirWatch for the future costs need to be built in
- ▶ Standardizing equipment where possible
- ▶ Buying warranty support from vendors
- ▶ Plan adequate support levels
- ▶ Plan rotation with input from stakeholders
- ▶ Guidance for future requests for grants to include support and replacement plan