

## Print procedures change in computer labs & classrooms

In computer lab classrooms, students usually print assignments and notes just before start time. Why? It's free! In general-use computer labs, they pay 2 cents for each black and white print. This fall, students will pay for printing in all computer labs, including classrooms. We need your help in communicating this change to students who may rely upon free prints in classrooms.

Students will also use a new print system, called Virtual Release Station (VRS), which gives them more control over print jobs. To use the system, students will:

- Deposit money onto the RebelCard, either online or at a campus machine.
- Command a document to print.
- Log in to the print queue using an OIT computing account.
- See the number of pages scheduled to print, and the associated costs, then select the jobs to send to the printer. Unwanted print jobs can be deleted.

These management capabilities will likely reduce the number of costly printing errors, and will save the paper wasted on unwanted prints.

"Students no longer need to see a lab monitor to add money to their lab print accounts," says John Ng, a computer facilities supervisor who helped implement the changes. In the past, students had to transfer money to their Rebelcard then ask a lab monitor to swipe their cards to transfer a portion of those funds to a print account."

Faculty who teach in computer teaching facilities may need to remind students to keep money on their Rebelcards, especially if printing is a requirement of the course. See below for price.

## Print costs increase

Costs per print in computer labs will increase this fall, although the amount has not yet been determined. After an audit of costs to replace toner cartridges, paper, and printers, OIT determined that prints should cost about 3 cents for black and white prints, and about 40 cents for color. The Student Technology Advisory Board agreed to pay the increase. The amounts are being discussed with the libraries staff to ensure consistent costs across facilities and will be finalized later this summer.

COMPUTER PURCHASE PROCESS **PG. 2**

SOFTWARE DISCOUNTS **PG. 3**

TWEETING OUTAGE NOTIFICATIONS **PG. 4**



FDH 235 IS ONE OF THE MANY TEACHING FACILITIES CONVERTING TO A PAY-FOR-PRINT SYSTEM THIS FALL

## Wireless customers maximize service with the right card

Looking for more speed and stability in your wireless connection? To get the most out of your new laptop, make sure to order one with an 802.11N 5Ghz card, also called A/B/G/N. All Apple computers currently ship with 802.11 A/B/G/N so there's no need to change configurations when ordering a Mac Laptop.

PC computer vendors continue to change the way they reference wireless cards during the purchasing process. "I bought the wrong card, and I even know what I'm looking for," says Mike Albano, network engineer. He accidentally bought a card that works best with 2.4Ghz B/G and N networks, and therefore he won't get the best performance associated with the 5 Ghz N network.

"Customers who select N cards, which support 2.4 GHz and 5 GHz frequency, will enjoy faster wireless speeds and better performance," explains Albano. N offers better network service every where, in high and low use areas.

About 90% of the UNLV Wireless access points provide service in the 2.4 GHz and 5 GHz frequencies. Check out the details about each configuration in the box on page 4.

802.11 VS. 3G Wireless

see pg. 4

### Coming Fall '09

UNLV-Secure. It's faster, encrypted, and reduces the number of times you have to log in.

# New computers not getting to you fast enough?

A new computer can arrive at your desk, ready for use, in as quick as 4-6 weeks. Or, it could take several months, depending on a number of factors. Use this chart to check out the process and find ways to speed it up for yourself and your staff. OIT cannot guarantee a time frame, but many of our customers report that if these tips are followed, a new computer can arrive in about a month. Once OIT receives the computer, it takes us, on average, 12 days to get the computer to your desk. If you have suggestions regarding our procedures, please contact David Heiser, manager of Desktop Services, extension 50733.

1

## Order & Ship

**2-3 weeks for delivery**

Please consult OIT's website for recommended hardware specifications and to access deals offered by partner vendors.

**CUSTOMER TIPS**

- PCard orders process more quickly
- In this order, include your name, phone number, department, PO number/order number, and tracking number.

**CUSTOMER TIPS**

The packaging information should include the name of the person who will be responsible for the computer. Otherwise, Receiving must call the computer manufacturer to determine who should receive the device.

2

## UNLV Receives, Tags & Delivers Computers to Technicians

**5 days - 3 weeks**

The computer is delivered to UNLV's Receiving department. Property Control tags the computer to include it in UNLV's inventory.

Receiving delivers the computer to OIT, unless it is for an employee

in a department that employs its own technicians, like the Thomas & Mack or the Libraries. Those departments configure their computers.

3

## OIT Receives Computer & Interviews Owner

OIT records receipt of the computer into its help request system & contacts the customer to determine software needs.

**CUSTOMER TIP**

- The speed of this process depends upon OIT's ability to contact the customer.
- To prepare, consider the software you use daily, and be sure to notify OIT if you connect to any additional servers or shared file storage. If you access multiple e-mail files, or archive e-mail, be sure to let us know.



Always order an operating system with the computer. This saves money. Our license with Microsoft does not permit us to install Windows on computers that do not already have a version of Windows installed.

## Repurpose or Dispose Computers

To repurpose or dispose a computer, submit a Property Movement Request (PMR) at the UNLV facilities website. In the notes section of the request, indicate if you want us to rebuild the computer for someone else, or dispose of it. OIT will create a work order and contact the customer.

For rebuilds, OIT contacts you to conduct a software interview. Our staff

clean the computer of personal data, rebuild it, then deliver it back to you, usually within two days of picking it up.

For surplus, OIT works with you to schedule a pick up date. Then we determine if the computer may be rebuilt and repurposed, could be sold at UNLV's surplus sale, or should be recycled for parts and disposal.

## Move a Computer

Large department moves are typically organized by Planning & Construction or the Provost Office. For small moves, like one or two individuals, customers may move their own computers or contact Capital North America (702-457-5353). In all instances, a Property Movement Request (PMR) should be submitted through the facilities website.



CUSTOMERS CAN PICK UP THEIR COMPUTERS FROM OIT IF THEY WOULD RATHER CONFIGURE THEM. THIS MAY REDUCE THE AMOUNT OF DOWNTIME FOR CUSTOMERS.

#### 4 OIT Configures Computer According to Customer Needs

#### 5 OIT Delivers & Sets Up Computer

STEPS 3 TO 5 TAKE AN AVERAGE OF 12 WORKDAYS

Technicians install the software and optimize the operating system to perform at the best speeds. The configuration time is dependent on the hardware, operating system, and software.

**CUSTOMER TIP**

The time required for set up depends upon the number of files that need to be transferred.



*“Back in the old days, it took 2-3 months. Now it takes maybe a month or less. Once the computer is on campus, and we told you what we wanted on it, the process was smooth.”*

MARIA FIGUEROA  
ADMINISTRATIVE ASSISTANT IV, GEOSCIENCE

*“When you come over, it’s a matter of plugging it in, making sure the accounts are set up. It’s a very small inconvenience for a faculty member.”*

JILL RACICOT  
ADMINISTRATIVE ASSISTANT IV, NURSING

## PC updates are important, especially service packs

Please check your laptops, personal computers and office computers to ensure that they are current. It is important that Windows computers stay updated for the best security, system reliability, program compatibility, and functionality. Sometimes these updates are required in order to use certain features or systems. For example, some secure wireless connections require the most recent Service Packs.

- Run Windows Updates regularly, or turn on Automatic Updates to run each week.
- If you have Windows XP, please ensure you have SP3 (Service Pack 3) and all updates.
- If you have Windows Vista, please ensure you have SP1 (Service Pack 1) and all updates.
- Updates can take a long time to download and install, and usually require a reboot, so start them when you are sure you have the time.

Instructions for updates are available at [oit.unlv.edu](http://oit.unlv.edu) under “Software & Hardware,” then “PC Computer Maintenance.”

## Software discounts for students & staff

Before spending full-price on software, why not see if UNLV gets it at a discount? OIT revamped its software website to show you what’s available at a discount through our vendors. From our site you can see:

- How to get software
- How much support OIT offers for each software product
- Which computer lab provides the software

Be sure to tell students about software deals too. For example, all Information Systems and Computer Science students get free development software from Microsoft.



FACULTY & STAFF SHOULD ENCOURAGE STUDENTS TO USE REBELMAIL

# Tweets keep followers informed

OIT didn't start using Twitter because it's cool, even though it is. On May 5th, John Lynn, a technician in Student Affairs, asked OIT to tweet about incidents, like Lotus Notes outages and resolutions. It took just a few minutes to set up a Twitter account and coordinate it with our website. When we post news items to our website, they're propagated to Twitter.

In an instant, any of our followers, or the general public, can see incidents from their own Twitter accounts, Facebook, or through free Tweet aggregators like Tweetdeck (which can collect and display any tweet with the word "UNLV" or "Rebelmail"—a great way to eavesdrop on everyday thoughts, but also a great way to stay informed!).

"We're going to streamline this process even more," says Cam Johnson, manager of the network operations center. "Right now there's a 10-15 minute delay associated with some of our communication tools. By the time fall semester hits, new procedures will allow incident notifications to be instantaneous."

John Lynn is pleased with the results. In an e-mail titled "Loved the Twitter Update" he wrote, "I got reports that Lotus Notes was down (and mine went down as well). I checked Twitter and saw this [the notification]. Perfect! Saved me a call to the help desk."

According to a June 2009 Nielsen report, Twitter is the "fastest-growing social network, by far ... Time spent on the micro-blogging website soared a whopping 3,712% since April of last year" (cnnmoney.com). If you tweet, follow unlv\_oit.

## Infrastructure Improvements

- In mid-August, OIT plans to put WebCampus on more stable hardware and database software systems to improve its stability and reliability. The work will require an extended outage between August 13-17th.
- We continue to work with IBM to resolve Lotus Notes stability issues.
- OIT completed the fiber interconnect between UNLV College of Engineering and the Regional Transportation Center. The RTC provided specialized computer workstations to the College of Engineering, which connect directly to the RTC network; this allows UNLV researchers to analyze information and develop software based on the data collected by the RTC.
- We created a knowledge base for our support staff; this is used to quickly find answers to your technical questions. It may lead to quicker resolutions for your computing needs.

 **NEED AN ACCOUNT?**  
Go to [newuser.unlv.edu](http://newuser.unlv.edu)

# What's 802.11 & 3G mean?

UNLV uses 802.11 wireless technology. Below you can see how our service differs from cellular wireless, called 3G.

802.11 WIRELESS (WI-FI)	CELLULAR WIRELESS (3G)
Signal sent by "access points" which are hung on ceilings and connected to a wired network.	Signal sent by cellular towers.
Coverage restricted to small areas. One access point may cover a 40-150 foot radius on one floor of a building. Average speeds are much higher (2-300 Mbps). A wireless 'hotspot' is a location where 802.11 wireless is available.	Large coverage areas. One cell tower may provide data service for several miles in all directions. Average speeds are slower, (14.4 mb on downlink and 5.8 on uplink). Good for limited web surfing, chat and e-mail.
Must have a device compatible with 802.11A/B/G/N.	Must have a device compatible with 3G. The card only associates with the designated carrier network.
Free on campus and in many locations, like local coffee shops. Some locations, like Starbucks, offer 802.11 wireless services for "pay as you go" or monthly fees.	Pay a monthly service charge, with your phone bill.
Typically requires a log in process to authorize use. A wireless customer may use the same wireless card to connect to an access point in their home, at school, or in a local coffee shop.	Does not require a login other than initial activation with the carrier. All 3G wireless networks are carrier dependent. Service purchased from a vendor such as AT&T is exclusive to AT&T. This eliminates the process of finding and associating with a wireless network.

TECHNICAL BREAKDOWN OF  
**Wireless 802.11**  
TECHNOLOGIES

**802.11B**  
Original wireless, covers areas at speeds up to 11 mbps. Operates in the 2.4 GHz frequency.

**802.11G**  
Improvement over B, up to 54mbps. Operates in the 2.4 GHz frequency.

**802.11N**  
Can operate in 2.4 GHz or 5GHz. Major speed (up to 300 Mbps) and signal stability improvements over previous technologies. A card supporting N in both 2.4 and 5GHz will perform better in all areas.

**802.11A**  
Similar speeds to G. Operates in 5GHz, the 5GHz frequency offers the ability to place more wireless APs in a smaller area so a greater number of laptops can use wireless at the same time in a small area such as a classroom. 802.11A requires more power (shortens battery life) and the higher frequency signal is more easily absorbed by walls and other obstacles which can limit the coverage area.