



Bob Leverone

There's nothing fluffy about the heavily guarded, coal-guzzling facility where Apple keeps users' data. A wary Mark Harris tries to pay a surprise visit

Do you know where your most treasured information is stored — phone numbers, records of your calls and photographs and videos of your friends and family? You may think it is securely held on the phone in your pocket or the tablet in your bag, but if you have the latest iPhone or if you've upgraded the software on your Apple device — phone, tablet or music player — to iOS 5, then it is 4,000 miles away, being watched over by someone you've never met. Welcome to Maiden, North Carolina, population 3,310.

A tiny town on the edge of the Appalachian mountains, with an abundance of cheap electricity from the local coal industry, Maiden is home to the iCloud. When Steve Jobs announced the concept last year, a few months before his death in October, you could have been forgiven for thinking it was a mass of data floating on the edge of space.

In fact, the iCloud is not only solid but it's big and dirty, housed in banks of whirring hard drives enclosed in a giant air-conditioned building the size of an aeroplane factory. Codenamed Project Dolphin, the \$1 billion installation is home to the computers that hold billions of emails, photos, songs and videos uploaded from millions of iPhones and iPads around the world.

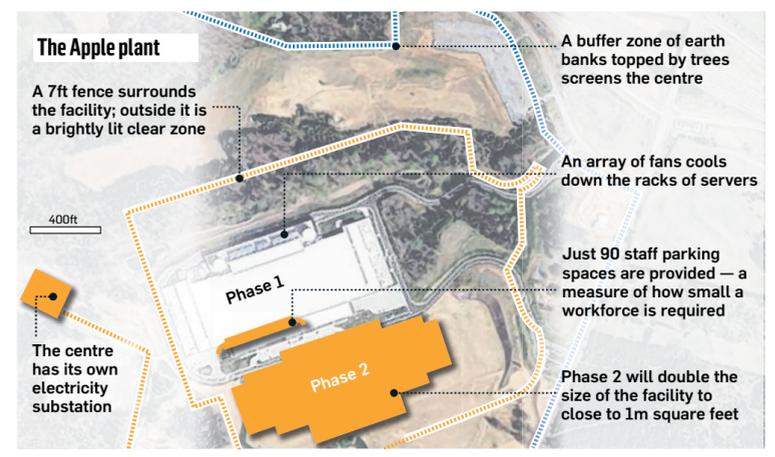
When a customer runs iOS 5 for the first time, they will be asked whether they want to use iCloud. The vast majority of users will say yes, and their data — previously backed up only on their own computer, if at all — will be sent to Apple's data centre. The company says this frees your device from having to be synched to a Mac or PC. Owners of multiple Apple devices can sync them all to a single online profile held in the centre; lose your iPad and you can "imprint" your profile and data on to a new device, no wires needed.

The service is a success with users, if Apple's latest financial results are any guide. Last week the company announced a record net profit of \$13 billion for the last three months of 2011, the fruits of selling 37m iPhones and 15.4m iPads — nearly all of which will be signed up to iCloud.

Apple's 183-acre North Carolina compound is so vast that it has its own electricity substation and water treatment plant. There's even a purpose-built fire and ambulance station just outside the perimeter.

When you arrive in Maiden — motto: "A great place to call home" — you are assured of a

DARK SHADOW OF THE ICLOUD



Work has already started on phase 2 and a rumoured solar power plant

The site is in Maiden but few of the town's 3,310 inhabitants seem to know much about it

A guardhouse with floodlights, steel bollards and tyre shredders greets visitors

Miller of the Catawba county economic development corporation, the organisation that persuaded Apple to come to Maiden in the first place.

"I'm fairly close with the guys [at the data centre]," he says. "And I've been no further inside than the front door."

What Miller can share, though, is the architect's plan of the North Carolina compound. It reveals a breathtaking level of security, even for a company that once kept a prototype of the iPad chained to a desk in a locked room at its Californian headquarters.

The data centre is a massive 500,000 sq ft structure, next to a levelled area where construction on Project Dolphin's twin is set to begin. When the second phase is complete (details of which are not available), it will make this site one of the biggest installations of its kind on the planet.

Miller admits it was not Maiden's folksy appeal or even the beautifully tended greens of the nearby Glen Oaks Golf Club that drew Apple.

"Despite our charm, the real reason the company came here is the cost of electricity," he admits. Apple's data centre is estimated to need up to 100MW of electricity — the same as 200,000 UK homes — and prices in Maiden are a fraction of those in Silicon Valley.

According to Greenpeace, North Carolina's electricity is also some of the dirtiest in America, generated mostly by coal from the nearby Appalachian seams. The environmental charity notes that Apple currently takes less than 7% of its power from renewable sources — the lowest

DON'T PANIC

Your tech queries answered by Nigel Powell

Q As I type emails on my Windows laptop, the cursor jumps all over the screen and sometimes wanders off it altogether. Could I be brushing the touchpad with my sleeve? *MH, via email*

having to delve into the laptop's settings to achieve the same effect. It's simple and it works.

Q I have digital CCTV that records in .264 format. I'd like to convert videos into a more manageable format, such as .mpg or .avi. Can you help? *CM, via email*

Let's get the jargon out of the way first: H.264 is a high-definition video format, also known as MPEG-4 AVC. To convert it to .avi, to pick one of the many alternatives, I recommend you install the Freemake Video Converter program (free from

The "touchpad twitch" you describe should get its own Wikipedia entry, it's such a common problem. Touchpads are a boon to laptop owners who aren't able to use a mouse but, as manufacturers keep increasing the pad's area and sensitivity, they increase the risk of what you think is happening: brushing it with your sleeve or arm. This can be a real annoyance, especially to fast typists who are continually brought up short by the effect.

Fortunately there is a simple solution. Go to touchpad-blocker.com to download and install the free Touchpad Blocker program. This lets you disable the touchpad while you type then turn it back on using a control-key sequence of your choice — much easier than

freemake.com). It's fast, flexible and easy to use. The software is capable of converting your H.264 files into a variety of formats, including ones that will play on a mobile phone or a DVD, and ones that are suitable for uploading to YouTube.

Q When I try to open PDF documents attached to emails, I get an error message saying "A font contains a bad CMap/Encoding". What can I do? *HRC, via email*

This error occurs when you try to use an old PDF reader program to open a recently made document. You need to upgrade the copy of Adobe Acrobat Reader that is already on your computer, by downloading the latest version from adobe.com/reader. Once this free upgrade has been installed, the problem will go away.

Email your tech queries to dontpanic@sunday-times.co.uk



IPHONE GAMING

SOULCALIBUR
★★★★☆
£7.99. Age 9

SoulCalibur, a martial arts beat-'em-up, made its debut on Sega's Dreamcast way back in 1999 and has appeared on most consoles since. Now it's available for iPhone and iPad, and while it's one of the most expensive games to go into the App Store — even this price includes a 20% "launch discount" — there is still a lot to love. Fans of the franchise will welcome the return of the 19 characters from the original game, and the choice of ways to fight ranges from Arcade Battle (classic, one-on-one fights) to Time Attack (win as quickly as you can) and Survival (limited life). It still looks spiffing, and the translation of the controls to the touchscreen has been handled deftly.



TRIPLE TOWN
★★★★★
Free. Age 4

Triple Town has been a popular game on Facebook for some time now but its iPhone and iPad version is such a success that it feels like it could have been made for mobile devices from the start. The gameplay is straightforward: plant items such as trees and grass on a simple grid and, when you have got three in a row, they will merge to form a single, higher-value object.

NFL FLICK KICKER
★★★★☆
69p. Age 4

With the Super Bowl taking place next weekend, now is the time to get an American football game on your iPhone or iPad. NFL Flick Kicker ignores the more arcane aspects of the sport in favour of its most familiar element: wellying field goals and punts from all around the pitch, following in the boot-steps of the same developer's excellent Flick Kick Football. Official NFL licensing means that the game features proper kits for all 32 teams in the league, while the presentation is console-slick. The gameplay, meanwhile, is just right, with the finely tuned controls letting you aim your kicks against the wind.

