

## uiCard FAQs

### *Who is CISRA ?*

CISRA stands for Canon Information Systems Research Australia Pty Ltd. It is the Australian R&D laboratories of Canon Inc. We have around 200 scientists and staff, with a focus on Intelligent Imaging, Multi Media Technologies and related systems.

### *Why did CISRA develop uiCard technology?*

Over the last few years CISRA has been working on projects that link Internet, iTV and online services with Canon's competencies. uiCard is a direct result of that approach.

### *What applications are possible ?*

An unlimited range of applications can use uiCard:

- convenience such as home-shopping or home-banking
- entertainment such as games or movies
- information access such as restaurant or city guides, TV-guides
- kids and adults trading cards
- there is even a keyboard card for e-mail and a payment card for transactions and purchases

Soon there will be application tool kits available for Content and Service Providers.

### *Can you give an outline of uiCard technology ?*

uiCard is a system that uses ISO standard smartcards with icons printed on the surface which become active "buttons" when the uiCard is inserted into a uiPad (smartcard reader).

The uiCards promote content & services that are available on the Internet or via interactive TV (iTV) directly to consumers.

### *What are the main advantages of uiCard over other, similar, technology ?*

Basically uiCard is a direct link to web sites or online services.

Currently, standard Internet portals require a PC and mouse to navigate and there is lots of typing of URLs, etc. Until now, there has been no physical bridge between the real world and the online world, so online services could not effectively take consumers directly and conveniently to their service.

In iTV environments, PC-type interfaces are not really suited for rapid and easy access in a lounge room. Interactive TV systems use a remote control and menu options, which are very inconvenient to use. Some systems allow programming of the remote control, but that is also time-consuming to enter and update. None of these systems provide a secure payment system, whereas uiCard solves all the above problems elegantly.

### *What is the vision for uiCard technology ?*

uiCard won the prestigious “Australian Product of the Year 2001” award. The Australian Design Award judges said: “*uiCard has the potential to change global customer and client dealings. It turns the Internet into a truly useable and useful everyday tool.*”

Our vision is to make uiCard the standard user interface for on-line services everywhere by leveraging uiCard’s unique capabilities to advertise, access and transact on-line services.

We believe this is possible because uiCard makes access to services very easy for customers and gives businesses a way to promote and to connect directly with their customers, while also offering loyalty programs.

Therefore, instead of having to use a PC, a browser, a keyboard and mouse, people can just put in a uiCard and touch the screen to get to a web site or service, and then choose from the options there. This really is a big difference, because the Internet becomes transparent to the user, instead of being a barrier.

And: we have discovered that people of all ages like to collect the cards !

### *What are the key benefits of uiCard ?*

The key feature of the uiCard technology is that each uiCard has its own user-interface printed on the surface, and the uiPad provides direct access to online or iTV services and content.

Conveniently, the uiCard system allows access through set-top-box or PC platforms to networked services. The system software allows either walled-garden or open system approaches to providing access to content and services. Development tools help the development of easy-to-use uiCard web sites and uiCards.

#### ☺ Ease of Use

Our challenge was to provide a very simple user-interface that makes it convenient and fun for consumers to use. Feedback from our customers suggests that we have achieved our aim.

#### ☺ Versatility

The types of goods and services that can be promoted using uiCard are virtually limitless. Basically, anything that can be advertised and sold on the Internet can be promoted with uiCard.

#### ☺ Promotional Strength

The uiCards themselves are simultaneously the promotion and the interface that takes consumers directly to the promoted service site, bypassing other promotions that may distract the consumer from going to your online service. They can then directly view, play purchase, transact, etc.

#### ☺ Security

uiCard uses smartcard technology that allows for secure transactions and e-commerce functionality with more security than current credit card payments.

### *When will uiCard be available ?*

Canon/CISRA is currently discussing market trials with potential business partners and is expecting first deployments in 2002.

*What is CISRA doing to roll out uiCard ?*

uiCard is brand new to the market. We are already working with several other companies who are keen to participate in the business, and we expect to form strategic alliances with companies in the finance, smart-card, Internet and interactive TV areas, to accelerate our market entry and uiCard take-up.

There will be further announcements soon.

*What infrastructure is necessary for the operation of uiCard ?*

In many households the infrastructure already exists.

You need a PC with Internet connection or a uiCard-enabled set-top-box with your TV.

Merchants will require the same infrastructure as their existing websites.

*Does uiCard use standard smartcards ?*

Smartcards are plastic cards with small memory chips embedded that are commonly used for such things as phone cards. uiCards are ISO-7816-3 standard smartcards and are about the size of a credit card.

The smartcards can range from cheap memory cards to sophisticated microprocessor cards, it depends on your application and budget.

*How much bandwidth is required to run uiCard applications ?*

uiCard will run applications at any speed, from 56k dial-up modem to broadband speeds. Naturally, sometimes more speed is better than less, for video-email for example it is preferable to have a high bandwidth connection like cable or DSL.

*How does uiCard communicate with the Internet?*

When the uiCard is inserted into the uiPad, the user can touch a transparent screen above the icons on the uiCard. The uiPad sends information such as the service URL and location touched on a uiCard via an infrared port to the set-top-box or via the USB port to a PC.

It then sends the corresponding http data to the application server on the Internet.

The application server then responds to the data requests by sending back information to be displayed on the TV.

In other words it works just like a standard remote control, except better.

*How much does a uiCard cost ?*

The cost of the card depend on the capabilities of the computer chip on the card. This in turn depends on the application for the uiCard.

Initially and in most cases a uiCard will cost about US50c to manufacture.

Very secure uiCards (such as the ones used for banking) may cost more. Prices will come down the more uiCards are in the market. It is anticipated that most Content Providers will provide free uiCards to consumers in order to promote their services or content.

*Are there a wired and a wireless model of the uiPad ?*

There is a wireless infra-red and a wired USB version of the uiPad. The infra-red uiPad works with set top boxes and the USB version works with PCs. In the future we may develop a wireless uiPad using new industry standard protocols like Bluetooth, etc.

*How much does the uiPad cost ?*

Initially we anticipate that uiPads will be made available to consumers as part of a bundled offer, say by an ISP, iTV network, Content/Service Provider or as part of a CRM package. Eventually, uiPads will be available through retail stores. The retail price has not yet been set but we expect that prices will come down the more uiCards and uiPads there are in the market.

*Where will I be able to get a uiPad ?*

uiCard is a brand new product, it is currently being tested in different markets. Eventually, it may be purchased in retail stores, it may come as part of a bundled offer from your ISP or with the set-top-box when you subscribe to interactive TV. Watch for announcements when we roll out uiCard.

*Will uiCard work with all set-top-boxes ?*

No, it will only work with uiCard-enabled set top boxes. Luckily, it is not difficult, nor costly to enable a set top box for uiCard operation.

*What do I need to use uiCard on my PC ?*

You will need a uiPad and the corresponding (free) uiCard client software. The software will be made available via the Internet when the first public uiCard services are rolled out some time in 2002.

*Are uiCard transactions secure ?*

Yes, uiCard transactions are as secure as the service provider makes them. In some cases uiCards help make the transaction even more secure than current credit card payments through the use of high security smartcards. uiCard can support various types of standard smartcards, including low-cost memory cards, protected cards, and also fully secure CPU cards where all information is encrypted. This type of secure card is becoming very popular in many countries for banking and other applications. The uiCards can also have a keypad to enter PIN codes or passwords.

*What information is stored on the uiCard ?*

The uiCard is a very thin client. It only stores minimal information such as application ID and card ID, as well as the location of the buttons that are printed on its surface so it recognises which “button” is being “pushed”. It uses the data to communicate with the servers and to find services and websites.

*Where are the applications stored and run ?*

The application is stored on a remote server on the Internet. uiCard uses the same client/server architecture as the Internet. This means that some parts of an application (such as Java applets) may be run on the local machine and other parts are run on the remote server. It is up to the application developer to decide which way they want to go, uiCard is flexible.

*How much memory is required on a uiCard ?*

uiCards use ISO standard memory and microprocessor chips. A wide range of memory is supported.

*How can I learn more about uiCard ?*

For more information on uiCard and how it can benefit your business, please contact CISRA :



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