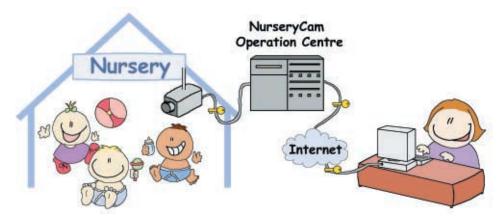
# **Parents Info**





# What is NurseryCam?

NurseryCam is a secure webcam facility which allows parents to view live video images of their children in day nurseries and pre-schools securely over the Internet.

Briefly, digital video cameras are fitted in each playroom at your nursery. All cameras are fixed on the wall/ceiling to give a generic view of the room, it cannot be panned, tilted or zoomed in to any particular child or member of staff. It may not be easy to see the facial expression of any child, and parents usually pick up their children by the colour and type of clothing they wear.

NurseryCam is video only, there is no audio component.

All live images are encrypted before being sent through the Internet and are securely accessed only by bona fide parents with the correct passwords.

NurseryCam is designed to allow parents to see their children from anywhere, be it at work, at home or on a business trip overseas. So there is no special software required as long as you have an Internet connection. Image update rate varies according to the type of Internet connection parents have, but you could expect up to 2 frames per second.

And to cater for parents who do not have internet access at work or who are constantly on the move, NurseryCam is launching the first-in-the-world **mobile phone viewing** in the next few months. Parents will then be able to watch their children playing at their nursery with their colour screen mobile phones.

When an authorised parent has successfully logged in, he/she will see a user-friendly viewing screen that looks like this on the right. The buttons on the right hand side bring parents to the room or rooms where their children learn, play, have fun and sometimes nap. Parents will also see the details of their 20 previous login history, an easy way for parents to perform some security check on their own account activity.

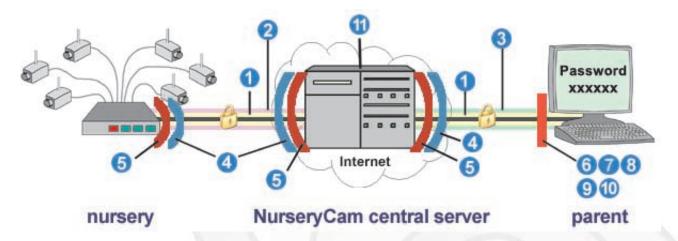




## **Security**

Security is our highest priority. We employ the highest security technologies. The military uses 3DES to encrypt important images, online banking uses SSL-128 to encrypt all sensitive information and major corporate companies use VPN, firewall to protect their network and computers. NurseryCam uses all of them and more. It is security to the extreme!

Furthermore, banks and military organisations involve many people and have many access points. On the other hand, NurseryCam builds on simple, proprietary platform where we have built layers of security and closed off all possible loopholes:



#### 1. 3DES image encryption

NurseryCam system encrypts every single image, where any information is scrambled, before it leaves your nursery. Image encryption prevents anyone from tapping anywhere on the phone line between your nursery and a parent PC to eavesdrop the images. All transmitted images are live and encrypted. No images can be recorded through the Internet.

#### 2. VPN (Virtual private network)

VPN is a technology that makes a secure tunnel for the transmission of data. It is usually used by large companies to transmit confidential data from one office to another. While each image is encrypted, this secure tunnel provides an extra secure layer.

### 3. SSL-128 (Secure Socket Link) data encryption

Parent's login password and all information sent out from NurseryCam are encrypted with the strong-grade 128-bit SSL (secure socket link) protocol. Encryption prevents anyone from tapping on the phone line to eavesdrop the sensitive information, so that no parent's identity could be intercepted or forged.

SSL uses public-key encryption to exchange a session key between the user and server; this session key is used to encrypt the http transaction (both request and response). Each transaction uses a different session key so that if someone manages to decrypt a transaction, that does not mean that they've found the server's secret key; if they want to decrypt another transaction, they'll need to spend as much time and effort on the second transaction as they did on the first.

Netscape servers and browsers do encryption using either a 40-bit secret key or a 128-bit secret key. Many people feel that using a 40-bit key is insecure because it's vulnerable to a "brute force" attack (trying each of the 2^40 possible keys until you find the one that decrypts the message). It is thought that with specialized hardware, 40-bit messages can be cracked in minutes to hours. Using a 128-bit key eliminates this problem because there are 2^128 instead of 2^40 possible keys. To crack a message encrypted with such a key by brute force would take significantly longer than the age of the universe using conventional technology.

#### 4. Watchdog

Watchdog is programmed to routinely check all gateways and detect any suspicious activities. Any suspicious activity and multiple failed attempts would immediately trigger alarms.

#### 5. Firewall

Firewall is used to prevent unauthorized Internet users from accessing NurseryCam servers connected to the Internet. All messages entering or leaving the NurseryCam servers pass through the firewall, which examines each message and blocks those that do not meet our specified security criteria.



#### 6. Parent security control - exclusive application for viewing account

Only parents have exclusive access to their nursery's NurseryCam system. Every parent needs to go through our strict application process before obtaining their unique password account.

First, you'll need your nursery's NurseryCam ID and PIN, which only your nursery can provide (NurseryCam will not disclose this to a parent). Then you'll need to sign up for a password account on-line, providing information that your nursery will use to verify that you are really you. After you have completed the application, your nursery uses that information to either approve or deny your request for a viewing account. Parents must each have their own unique passwords.

#### 7. Parent security control - login history

We have developed a proprietary, patent-pending login system where parents can see their last twenty logins information detailing login status, location, source and network. It allows parents to do some of the security checks. If there is any suspicious activity happened to their account, this feature allows the parents to spot it immediately. NurseryCam is proud to have innovated this security monitoring function in-house, not even online banking has one.

#### 8. Parent security control - automatic timed logout

To prohibit unauthorised access to NurseryCam from an unattended logged on computer, your account automatically stops image updates after 5 minutes and has timed log-outs after 15 minutes of inactivity.

#### 9. Parent security control - camera & access time controls

Your nursery will limit individual parent's viewing access to only the room(s) his/her child is in (for eg. bear room and garden) and the time his/her child attends the nursery (for eg. Monday and Wednesday afternoons only).

#### 10. Parent security control - nursery details omitted

There is nothing on the parents' viewing page that discloses any information about the nursery. Therefore, there is no way to guess, let alone locate, that particular nursery out of the tens of thousands of nurseries and pre-schools throughout the United Kingdom.

#### 11. 24x7 security monitoring

Our monitoring system operates 24x7 to ensure that the highest security is maintained at all times. In addition, NurseryCam Operation Centre has various built-in functions to catch suspicious activities. For example we track all successful and failed login attempts and are very good at catching on to people who share their password (a definite no-no.). Accounts that have been abused will be suspended immediately.

While we manage the system, nurseries have full authority in switching off any camera or suspending any account via their online-control panel.

For security reasons we would not disclose certain security details on the web. But if you have any questions, please do not hesitate to email our security department at security@nurserycam.co.uk.

### **Contact Us**

If you have any queries or concerns, please do not hesitate to contact us. We are more than happy to listen and to help with any concerns you may have. We aim to provide the most comfortable viewing experience for parents and we are constantly improving and upgrading our service. Therefore, your suggestions are really very valueble to us.

### **NurseryCam Ltd**

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