In 2029, a mysterious virus devastated worldwide computer networks, nearly bringing civilization to its knees. A new virtual reality Matrix was built in its stead, creating a digital realm for both data transactions and computer-aided socializing. In 2064, a second Crash brought down the Matrix once again. By 2070, the Matrix of old—from the datajacks and cyberdecks of its users to the wired computer hosts and mile upon mile of fiberoptic cable spaghetti—is no more. A new Matrix has arisen, a world of augmented perceptions and wireless connections.

In *Shadowrun*, nearly everyone is part of this interlinked electronic world, whether they will it or not. Your personal *commlink* allows you to be online wherever you go, 24-7-365, so that you are always in touch by phone or messaging. *Augmented reality* allows you to access data from the Matrix just about anywhere, overlaying it upon your physical senses like a personal heads-up display. Want to see a map, a restaurant's menu, or an incoming email message? It's just a mental click away. Wireless networking also allows you to engage in computer-aided socializing with anyone in your immediate vicinity, whether you want to read that hot elf's profile, sell an extra pair of *Speed Coma* tickets, or take on a gaming contender in a round of *Avatar Assassin*.

Certain shadowrunners, however, manipulate the wireless world to their advantage. These *hackers* specialize in commanding programs and machines to do their bidding, manipulating data, or ferreting out information locked away in digital vaults. Hackers are not the only pirates navigating the electronic seas: *technomancers*—the evolved children of the Matrix—possess the ability to transform the wireless world with nothing but the power of their naked minds.

Both hackers and technomancers excel in accessing and exploiting wireless (and wired) networks. Together they fill a vital role in any shadowrunning team, not just for their net-ninja abilities to compromise security systems or gather vital pieces of data, but also for their skills in controlling armies of drones and fully interfacing with vehicles—giving them an edge that even cybered street samurai cannot match.

Most importantly, hackers and technomancers are no longer leashed to the clunky cyberdecks and wired systems that limited their predecessors. They are now mobile and integrated members of any shadowrunning team.

MATRIX 2.0 BASICS

The Matrix of 2070 is composed of a near-infinite number of overlapping wireless mesh networks used to control nearly every aspect of modern life. The new Matrix is built to ensure that it is omnipresent, accessible from all locations, and integrated into daily life.

AUGMENTED WORLD

Augmented reality (AR) includes all types of sensory enhancements overlaid on a user's normal real-world perceptions. This allows the average citizen to see, hear, touch, and even smell the Matrix continuously while still interacting with the normal everyday world around them. Applications of AR are discussed in detail on p. 209.

AR is not to be confused with *virtual reality* (VR), where artificial sensations from the Matrix overwhelm your real-world perceptions and immerse you in a simulated reality—mentally separating you from your physical body. Unless otherwise noted, this chapter refers to augmented reality—the most common way of using the Matrix—rather than virtual. VR is discussed in detail on p. 228.

MATRIX TOPOLOGY

The Matrix a complex organism, a vast collection of billions of nodes all linked together in various networks that are themselves linked together. At the bottom layer of the pyramid are individual users with their commlinks and *personal area networks* (p. 210). These users and PANs wirelessly interact with other PANs and devices all around them in a wireless mesh network. Homes and offices are integrated through a terminal—or *term* for short—that tends to serve as its multimedia center (image scanner, full-size printer, video screen or holo display, larger speakers, and so on). This network connects through numerous gateways and hardwired base stations to the local Matrix infrastructure; together, they form a telecommunications grid. These grids are, in turn, interlinked, forming the backbone of the Matrix itself.

DEVICE AND SOFTWARE RATINGS

Every computerized electronic device—from commlinks to cyberware to vidcams to mainagents—has a set of basic attributes for use in certain Matrix interactions. Some of these attributes—Response, and Signal—are determined by the machine's hardware capabilities. Others—Firewall and System—are determined by the device's operating system (OS) software. For simplicity, however, most devices in *SR4* are given a standard Device rating that bundles all of these attributes together. These attributes are detailed under *Matrix Attributes,* p. 212.

Software also comes with specific Program ratings that determine how effective that particular program is. Software is detailed under *Programs,* p. 225.

USING THE MATRIX

Every *Shadowrun* character possesses basic computer and electronics skills (unless you possess the Incompetent or Uneducated negative qualities, p. 83 and 84) and has personal experience with networking, searching for data, and using the Matrix in general. Standard denizens of the Sixth World use their commlinks/PANs on a constant basis to make telecom calls, experience augmented reality, search for data, keep in touch with teammates, and manage their finances. This, of course, does not make them hackers or technomancers. For characters who want to maximize their Matrix use, however, the skills of Computer (see *Using Computer Skill,* p. 218) and Data Search (see *Using Data Search Skill,* p. 220) are invaluable.

Interface

You are represented in the Matrix by your *persona,* the graphical user interface that executes all of your commands. Your persona icon is what other Matrix users see when they interact with you online (see *Persona,* p. 211).