



> @ > 4 A : 0 O A 5 B L .

Phantom, ! @ 5 4 0 1 2 ? @ 5 ; L 2006 - 13:28:45

> @ > 4 A : 0 O A 5 B L " " 5 E => A 5 @ 2 8 A 3 @ C ? " . 7 3 ; O 4 8 7 = C B @ 8 .

! 5 B L T S G N e t - : > < < 5 @ G 5 A : 0 O A 5 B L < 0 A H B 0 1 0 3 > @ > 4 0 K B L - / E .

! C I 5 A B 2 C 5 B A 1 1 O = 2 0 @ O 2 0 0 4 3 > 4 0 . & 5 ; L ! 5 B 8 2 @ 0 7 2 8 B 8 8

F 8 D @ > 2 K E B 5 E = > ; > 3 8 9 , > @ 3 0 = 8 7 0 F 8 8 F 8 D @ > 2 K E : 0 = 0 ; > 2

A 2 O 7 8 .

" 5 E = 8 G 5 A : 8 5 E 0 @ 0 : B 5 @ 8 A B 8 : 8 : Ethernet 100 Mbit. 0 < 0 3 8 A B @ 0 ; O E - U T P 5

cat. ? > ; L 7 > 2 0 B 5 ; O < - > 1 K G = > 2 8 B 0 O ? 0 @ 0 . ! 2 0 0 6 3 > 4 0 2 2 > 4 2

M : A ? ; C 0 B 0 F 8 N ? 5 @ 2 K E > ? B > 2 > ; > : > = = K E ; 8 = 8 9 .

5 A : > ; L : > A 5 @ 2 5 @ > 2 , ? > G B 8 A > B = O E 0 1 > 2 . A B 5 A B 2 5 = = > ,

= 5 A : > ; L : > ? > 4 A 5 B 5 9 .

> 4 5 ; L A 5 B 8 : ; ; 8 5 = B - A 5 @ 2 5 @ .

; O G 5 3 > = C 6 = 0 ; > : 0 ; L = 0 O A 5 B L ?

0 6 4 K 9 ? > ; L 7 > 2 0 B 5 ; L - 1 C 4 L > = ? @ > 3 @ 0 < < 8 A B 8 ; 8 ? @ > A B >

; N 1 8 B 5 ; L ? > 8 3 @ 0 B L - = 8 : > 3 4 0 = 5 A < > 6 5 B 8 < 5 B L C A 5 1 O 2 A 5

= 5 > 1 E > 4 8 < K 5 @ 5 A C @ A K . 4 = 8 < B @ 5 1 C N B A O = > 2 K 5 A @ 5 4 A B 2 0

@ 0 7 @ 0 1 > B : 8 8 4 > : C < 5 = B 0 F 8 O . @ C 3 8 < - 1 K A B @ > 8 C 4 > 1 = >

? 5 @ 5 4 0 B L 8 = D @ < 0 F 8 N . " @ 5 B L 8 < - = > 2 K 5 ? @ > 3 @ 0 < < K ,

> 1 = > 2 ; 5 = 8 O , 2 > 7 < > 6 = > A B L A ? @ > A 8 B L " 0 G B > O = 0 B 2 > @ 8 ; , 8

: 0 : M B > 8 A ? @ 0 2 8 B L ? " . 3 @ > : 0 < E > G 5 B A O 8 < 5 B L = > 2 K 5 8 3 @ C H : 8 ,

A @ 0 7 8 B L A O A 4 @ C 3 8 < 8 8 3 @ > : 0 < 8 . 2 A 5 ? @ 8 M B > < E > B O B 8 < 5 B L

: @ C 3 ; > A C B > G = K 9 8 4 5 H 5 2 K 9 = B 5 @ = 5 B 1 5 7 8 A ? > ; L 7 > 2 0 = 8 O

B 5 ; 5 D > = 0 , A 2 5 6 8 5 = > 2 > A B 8 .

! > 1 A B 2 5 = = > , M B 8 7 0 4 0 G 8 8 @ 5 H 0 5 B ; > : 0 ; L = 0 O A 5 B L . > A 0 < > 5

3 ; 0 2 = > 5 ? @ 5 8 < C I 5 A B 2 > ; > : 0 ; L = > 9 A 5 B 8 - 2 > 7 < > 6 = > A B L

> 1 I 5 = 8 O A ; N 4 L < 8 , : > B > @ K < 8 = B 5 @ 5 A = > B > 6 5 , G B > 8 B 5 1 5 . !

B 5 < 8 , : B > 6 8 2 Q B @ O 4 > < , 0 = 5 2 4 @ C 3 > < 3 > @ > 4 5 8 ; 8 4 @ C 3 > 9

A B @ 0 = 5 . A B 0 B 8 , 7 0 G 0 A B C N ? @ 8 ? > 4 ; ; N G 5 = 8 8 = > 2 K 9

? > ; L 7 > 2 0 B 5 ; L > 1 = 0 @ C 6 8 2 0 5 B 2 A 5 B 8 = 5 A : > ; L : > A 2 > 8 E

A B 0 @ K E 7 = 0 : > < K E . > 7 < > 6 = > , 8 < 5 = = > ? > M B > < C

A ; > 6 8 ; 0 A L B 0 E > @ > H 0 O : > < ? 0 = 8 O , "> 1 I = > A B L " 8

4 @ C 6 5 A B 2 5 = = 0 O > 1 A B 0 = > 2 : 0 , : > B > @ K 5 ? @ 8 A C B A B 2 C N B 2 ! 5 B 8

T S G N e t . ! 2 > 5 3 > @ > 4 0 ; ; C 1 ; N 4 5 9 A > 4 8 = 0 : > 2 K < 8 8 = B 5 @ 5 A 0 < 8 .

I 5 = C 6 = > A : 0 7 0 B L > A > F 8 0 ; L = > 9 7 = 0 G 8 < > A B 8

? > 4 > 1 = > 3 > ? @ > 5 : B 0 . 0 6 4 K 9 G 5 ; > 2 5 : 4 > ; 6 5 = 8 < 5 B L

; N 1 8 < > 5 7 0 = O B 8 5 . 2 B > < A ; C G 0 5 , : > 3 4 0 = 5 < > 6 5 B = 0 9 B 8

A 5 1 5 7 0 = O B 8 5 ? > 4 C H 5 , > = = 0 G 8 = 0 5 B C ? > B @ 5 1 ; O B L



0;::>3>;L, 10;>20BLAO =0@:>B8:0<8, A2O7K20BLAO A  
:@8<8=0;><. ><?LNB5@, 0 B5< 1>;55 4><0H=OO A5BL,  
>4=>7=0G=> @5H05B ?@>1;5<C A2>1>4=>3> 2@5<5=8.  
@8GQ<, @5H05B A ?>;L7>9 4;O G5;>25:0, B.5. ?@8>1@5B0NBAO  
?@>D5AA8>=0;L=K5=02K:8, ?>2KH05BAO :20;8D8:0F8O 8;8,  
:0: <8=8<C<, ?@8>1@5B05BAO >?KB 2;045=8O  
:><?LNB5@><, GB> 2=0H5 2@5<O 2KA>:8E B5E=>;>389  
O2;O5BAO >1O70B5;L=K<.  
!59G0A 4;O =0A !5BL- MB> B>, GB> <K =5 70<5G05<. 5  
70<5G05< :0: 2>74CE 8;8 75<;N, :0:-B>, GB> O2;O5BAO  
>1O70B5;L=>9 A>AB02;ONI59 =0H59 687=8. :><?LNB5@,  
=5 ?>4::;NGQ==K9 2 :0:CN-;81> !5BL, 4;O =0A >AB0QBAAO  
"<5@B2K< 65;57><". =B5@=5B =8:>340 =5 AB0=5B B5<, G5<  
AB0;0 4;O =0A 3>@>4A:0O A5BL. = 03@5AA825=, 8 2=5<  
<0;>7=0:><K5 ;N48. !5BL, =0?@>B82, 4@C65;N1=0 8 2=59  
2A5 A2>8: 5A;8 =5 4@C7LO, B>, :0: <8=8<C<, ?@8OB5;8. -B8  
>B=>H5=8O 4>AB0B>G=> B@C4=> >1JOA=8BL. E <>6=>  
?>=OBL 8 ?@>GC2AB2>20BL, B>;L:> ?>?@>1>202 A0<><C.

**= B5 @ = 5 B 2 4 > < 0 H = 5 9 A 5 B 8**

=B5@=5B-?>4::;NG5=85 1K205B 42CE 284>2: dial-up (:>340  
?>;L7>20B5;L 72>=8B ?@>20945@C, 8A?>;L7CO B5;5D>=) 8  
?>AB>O==>5 A>548=5=85.  
@8 dial-up AB>8<>ABL A>548=5=8O AG8B05BAO ?> 2@5<5=8  
A>548=5=8O. -B> =5C4>1=>- ?>AB>O==K5 >1@K2K A2O78 =0  
;8=8OE 8" ?>2@5<5=:0" 70AB02;ONB ?>;L7>20B5;O  
A>E@0=OBL =B5@=5B-AB@0=8FK =0 48A:5 8 B>;L:> ?>A;5  
MB>3> ?@>3;O4K20BL 8E 2 A?>:>9=>9 >1AB0=>2:5. ;O  
MB>3> A45;0=K 4065 A?5F80;L=K5 ?@>3@0<<K, : ?@8<5@C,  
Teleport, Black Widow 8 4@. @8 ?>AB>O==>< A>548=5=88 MB8  
=54>AB0B:8 8AG570NB, ?>O2;O5BAO 2>7<>6=>ABL 83@0BL 2  
on-line 83@K, =5B =5>1E>48<>AB8 A845BL ?> =>G0< 8;8 640BL  
>?@545;5==>3> 2@5<5=8(4;O 2K3>4=>3> B0@8D0 A2O78).  
>O2;ONBAO "10@A:85 70<0H:8": 2K?8BL CB@5==NN G0H5G:C  
:>D5 8;8 2K:C@8BL A830@5BC, G8B0O A25685 =>2>AB8 8;8  
?>A;54=85 0=5:4>BK. N18B5;8 ?>83@0BL ?>;CG0NB B>, >  
G5< >=8 402=> <5GB0;8: AB018;L=CN 8 1KAB@CN A2O7L A  
83@>2K< =B5@=5B-A5@25@><. @>D5AA8>=0;K ?>;CG0NB  
B>, GB> 8< =5>1E>48<>: A2O7L A =B5@=5B>< 2 ;N1>9  
C4>1=K9 4;O =8E <><5=B.  
AB05B ;>38G=K9 2>?@>A:" >G5<C 65=5 2A5 8A?>;L7CNB  
?>AB>O==K9 2KE>4 2 =B5@=5B?" 0 MB> 5ABL =5 <5=55  
;>38G=K9 >B25B:" ;O >4=>3> G5;>25:0 MB>  
=5F5;5A>>1 @07=> 8;8 4>@>3>".  
# =0A 2 !5B8 8A?>;L7C5BAO ?>;=>F5==K9 ?>AB>O==K9



:0=0; 2 =B5@=5B. ;O :>=5G=>3> ?>;L7>20B5;O  
AB>8<>ABL 4>ABC?0 ?>;CG05BAO =52KA>:>9.C:>;L:>  
"=0@01>B0;" , AB>;L:> 8 70?;0B8; , # =0A 2 !5B8 5ABL  
?>;L7>20B5;8, :>B>@K< =B5@=5B >1E>48BAO <5=555 C. 5.  
2 <5AOF, => 5ABL 8"<=>AB@K", ?>B@51;ONI85 =030 C. 5.(=> 4;O  
MB>3> 8< ?@8E>48BAO D0:B8G5A:8 =5"2K;570BL" 87  
=B5@=5B0). @8G5<, B0@8D8:0F8O 4;O ?>;L7>20B5;O  
A45;0=0 ?> ?@8=F8?C"1>;LH5 @01>B05HL- <5=LH5  
?;0B8HL".  
1AG5B :>;8G5AB20 8 AB>8<>AB8 2545BAO =0 A?5F80;L=><  
A5@25@5 2 02B><0B8G5A:>< @568<5. >;L7>20B5;L,  
703;O=C2=0 AB@0=8FC =B5@=5B-AB0B8AB8:8(A=0@C68, 87  
=B5@=5B0, >=0 =54>ABC?=0), 2 ;N1>9 <><5=B 2@5<5=8  
<>65B C7=0BL, A:>;L:> >="=0@01>B0;" A53>4=O, ?> 4=O<  
70 B5:CI89 <5AOF 8;8 70 B5:CI89 3>4 ?> <5AOF0<. AB0B8  
3>2>@O, =0AB>;L:> ?>4@>1=CN A8AB5<C AB0B8AB8:8 =5  
?@54>AB02;05B =8 >48= <5AB=K9 ?@>20945@.  
>;LH8=AB2> ?>;L7>20B5;59 =0H59 !5B8 ACI5AB2CNI8<  
?>4:;NG5=85< : =B5@=5BC 4>2>;L=K.

**B=>H5=8O 2=CB@8 A5B8**

!5BL @01>B05B =0 ?@8=F8?5"As Is"(" :0: 5ABL"). -B>B ?C=: B  
7=0G8B 3>@074> 1>;LH5, =565;8 :065BAO =0 ?5@2K9 273;O4.  
-B>- ?5@2>5, GB>>1JOA=ONB =>2><C ?>;L7>20B5;N 2 A5B8.  
@8=F8? =0G8=05B 459AB2>20BL A <><5=B0 ?>4:;NG5=8O,  
:>340 ?>;L7>20B5;N 3>2>@OB, GB> =5B 30@0=B88, GB> 53>  
A53<5=B 1C45B @01>B>A?>A>15=. AB0B8, B0:>5 1K205B.  
-B>B ?@8=F8? @0A?@>AB@0=O5BAO 8 =0 >1KG=K5  
?>2A54=52=K5 701>BK ?>;L7>20B5;O, B.5. 5A;8  
?>;L7>20B5;L =5 <>65B GB>-;81> =0AB@>8BL, B>  
04<8=8AB@0B>@ =5 4>;65= 1@>A0BL A2>8 45;0 8  
=5<54;5==> 84B8 : ?>;L7>20B5;N @0718@0BLAO 2 53>  
?@>1;5<0E. = MB> A45;05B(?CABL =5 A@07C, 0 ?@8=0;8G88  
A2>1>4=>3> 2@5<5=8).  
!>25@H5==> 0=0;>38G=> AB@>OBAO >B=>H5=8O  
?>;L7>20B5;L-?>;L7>20B5;L: =8:B> =5 >1O70=  
>B:@K20BL 4>ABC? : A2>5<C :><?LNB5@C 4@C3><C  
?>;L7>20B5;N 8;8 ?><>30BL 2 =0AB@>9:5. >>115, A0<  
?@>F5AA ACI5AB2>20=8O A5B8 MB> >B@065=85  
G5;>25G5A:8E >B=>H5=89. 70:>=K, ?@8=OBK5 2 >115AB25,  
A>E@0=ONB A2>Q 2;8O=85. @8GQ< =5 B>;L:> A>F80;L=K5,  
=> 8 ?@02>2K5. ?@8<5@C, ?@8"A5B52><" :>=D;8:B5 <564C  
?>;L7>20B5;O<8 04<8= >1O70= 2AB0BL =0 AB>@>=C  
?>B5@?52H53>(??;>BL 4> AC451=>3> @0718@0B5;LAB20).  
04> A:070BL, GB>, 2>7<>6=>, >4=> ACI5AB2>20=85 MB>3>



? @ 028;0 ? @ 825;> : B><C, GB> 2 =0H59 !5B8 ?>4>1=KE  
? @ 5F545=B>2 5IQ =5 1K;>.

@8=F8?"AsIs" O2;O5BAO >A=>2=K<, => >= =5 4>;65=  
? @>B82>@5G8BL 4 @C38< ? @ 028;0< A5B8: =5;L7O <5H0BL  
@01>B>A?>A>1=>AB8 A5B8, ;><0BL :><?LNB5@K 4 @C38E  
?>;L7>20B5;59 8 B.?. @ 028;0 8 >1O70==>AB8 =8:B>  
A?5F80;L=> =5 ? @ 84C<K20;; >=8 ?>O28;8AL 2 ? @>F5AA5  
ACI5AB2>20=8O !5B8.

**0: A>74020;0AL !5BL?**

!B>@>==89 =01;N40B5;L=025@=O:0 =5 2848B A;>6=>AB59  
2 A>740=88 8 ?>445@60=88 ACI5AB2>20=8O A5B8. > 2  
@50;L=>AB8 =5 2AQ B0: ? @>AB>, B.:. ;>:0;L=0O A5BL 2A5340  
(8;8 ?>GB8 2A5340) A>7405BAO 8 @0728205BAO =0 G8AB><  
M=BC7807<5 5Q G;5=>2. -B> >A>15==> O@ :> 284=> ?>  
A5BO< 4 @C38E 3> @>4>2: 2A5 >=8 =5:><<5 @G5A:85.  
0AA<>B @8 <2A5 MB> =0 ? @8<5 @5 AB0=>2;5=8O =0H59 !5B8.  
=0G0;5 <K 4065 =5 ? @ 54?>;030;8, A :0:8<8 B@C4=>ABO<8  
? @84QBAO AB>;=:CBLAO. >ABC? =0 : @KH8 4><>2 1K;  
D0:B8G5A:8 ?5@5:@KB. 0G0ABCN 4065 B5<, :B> 8<5;  
A>>B25BAB2CNI85 C4>AB>25@5=8O 8 @07@5H5=8O. ?>B><C  
?5@54 =0<8 2AB0;0 48;5<<0: ;81> <K ?>;CG05<"1C<03C" =0  
A2>5 ACI5AB2>20=85; ;81> =0 =5>? @ 545;5==K9 A@>:  
>B:07K205<AO >B MB>9 8458.  
0H5 @C:>2>4AB2> 2K1@0;> ?5@2K9 ?C=:B 8 ?>H;> >1820BL  
?>@>38 G8=>2=8:>2. 5@2>5 >1@0I5=85 1K;> 2 # " ".  
07 @5H5=85 ?>;CG8;8, 40;LH5 8=8AB5@AB2> A2O78,  
048>G0AB>B=K9 :><8B5B 8 B.4. 8 B.?.  
:>=5G=>< 8B>35 ?>A;512 <5AOF52"E>645=89 ?> <C:0<"  
1K;8>D>@<;5=K A>>B25BAB2CNI85 1C<038. -B> 8 1K;>  
=0G0;>< =0H59 A5B8TSGNet.  
0;55 ?>A;54>20;8 70:C?:8 <0B5@80;>2, 70:07K =0  
873>B>2;5=85 :@5?560, ?>8A:8 AB0;L=>9 ? @>2>;>:8  
(8A?>;L7C5BAO 4;O C45@60=8O :015;O 2 2>74CE5),  
=5>1E>48<>3> <>=B06=>3> >1>@C4>20=8O.

**0: 85 ? @ >1;5<K 2 !5B8?**

45AL <K E>B5;8 @0AA:070BL > ? @>1;5<0E, A :>B> @K<8  
AB0;;8205<AO 2 ? @>F5AA5 ACI5AB2>20=8O !5B8, => ? @8H;8 :  
2K2>4C, GB> ? @>1;5<0, ?> 1>;LH><C AGQBC, >4=0.  
0728B85 ;>:0;L=>9 A5B8(;N1>9, =5 B>;L:> =0H59) 7028A8B  
>B 42CE >A=>2=KE D0:B>@>2: 0:B82=>AB8 CG0AB=8:>2 8  
=0;8G8O D8=0=A>2. A;8 A ?5@2K< >1KG=> ? @>1;5< =5  
1K205B, B> D8=0=A8 @>20=85- >A=>2=>9 :0<5=L



? @ 5 B : = > 2 5 = 8 O ? @ 8 @ 5 H 5 = 8 8 ? @ > 1 ; 5 < @ 0 7 2 8 B 8 O.  
1 > = 5 = B A : > 9 ? ; 0 B K E 2 0 B 0 5 B B > ; L : > = 0 B 5 : C I 8 5  
@ 5 < > = B = K 5 @ 0 1 > B K 8 = 5 1 > ; L H 8 5 @ 5 : > = A B @ C : F 8 8.  
# 2 5 ; 8 G 5 = 8 5 0 1 > = 5 = B : 8 2 ! 5 B 8 = 5 ? ; 0 = 8 @ C 5 B A O. ! 5 B 8  
1 > ; L H > 9 ? @ > F 5 = B A B C 4 5 = B > 2 , 5 A B L H : > ; L = 8 : 8 , 4 0 8 4 @ C 3 8 <  
? > ; L 7 > 2 0 B 5 ; O < M B > 1 C 4 5 B = 5 2 @ 0 4 > A B L.  
= B 5 @ 5 A = > , G B > = 0 4 0 = > < M B 0 ? 5 @ 0 7 2 8 B 8 O = 0 H 0 A 5 B L  
< 0 ; > 8 = B 5 @ 5 A = 0 A D 8 = 0 = A > 2 > 9 8 ; 8 ? > ; 8 B 8 G 5 A : > 9 B > G : 8  
7 @ 5 = 8 O. > : > 3 4 0 ; > : 0 ; L = 0 O A 5 B L 4 > A B 0 B > G = > @ 0 7 > 2 L Q B A O ,  
5 9 C 6 5 = 5 1 C 4 5 B = 0 A B > ; L : > = 5 > 1 E > 4 8 < 0 D 8 = 0 = A > 2 0 O  
? > 4 4 5 @ 6 : 0 , : 0 : M B > B @ 5 1 C 5 B A O A 5 9 G 0 A.  
> 4 > 1 = K 5 ? @ > 1 ; 5 < K A D 8 = 0 = A > 2 > 9 ? > 4 4 5 @ 6 : > 9 A 5 9 G 0 A  
8 A ? K B K 2 0 N B 1 > ; L H 8 = A B 2 > 4 > < 0 H = 8 E ; > : 0 ; L = K E A 5 B 5 9.

A = > 2 = K 5 ? @ > 1 ; 5 < K A > 7 4 0 = 8 O A 5 B 5 9 C @ > 2 = O 3. K B L - / E O :  
0 1 > B 0 ? @ 0 : B 8 G 5 A : 8 = 0 3 > ; > < M = B C 7 8 0 7 < 5. 5 4 > A B 0 B : 8  
B 5 E = > ; > 3 8 9 , = 5 4 > @ 0 1 > B : 8 8 ; 0 5 9 B A 0 A > A 2 > 8 < 8  
> ? 5 @ 0 F 8 > = = K < 8 A 8 A B 5 < 0 < 8 , = 5 E 2 0 B : 0 6 5 ; 0 = 8 O  
0 1 > = 5 = B > 2 ? @ > 4 2 8 = C B L ? > 7 = 0 = 8 O 2 > 1 ; 0 A B 8 B 5 E = > ; > 3 8 9  
> : > B > @ K 5 E > B O B 8 A ? > ; L 7 > 2 0 B L. > @ > 2 A B 2 > > 1 > @ C 4 > 2 0 = 8 O ,  
7 0 2 8 A 8 < > A B L > B : 0 G 5 A B 2 5 = > > 3 > M ; 5 : B @ > A = 0 1 6 5 = 8 O ,  
1 > @ L 1 0 A > 7 ; > A B = K < 8 = 5 ? ; 0 B 5 ; L I 8 : 0 < 8 , > B A C B A B 2 8 5  
? > 4 4 5 @ 6 : 8 A > A B > @ > = K 3 > A C 4 0 @ A B 2 0 8 2 ; 0 A B 5 9 < 5 A B = > 3 >  
C @ > 2 = O.