

0 = unblocked cells; 1 = blocked cells; X = unknown cells; Y = presumed path

T = target; A = agent;

Search problem:

```
0 0 0 0 0
0 0 1 0 0
0 0 1 1 0
0 0 1 1 0
0 0 A 1 T
```

STEP 1:

```
0 0 0 0 0  X X X  X  X      0 0 0  0 0
0 0 1 0 0  X X X  X  X      0 0 0  0 0
0 0 1 1 0  X X X  X  X      0 0 0  0 0
0 0 1 1 0  X X XY XY 0Y      0 0 Y   Y Y
0 0 A 1 T  X X AY 1  T      0 0 AY 1 T
```

STEP 2:

```
0 0 0 0 0  X X X  X  X      0 0 0  0 0
0 0 1 0 0  X X X  X  X      0 0 0  0 0
0 0 1 1 0  X X XY XY 0Y      0 0 Y   Y Y
0 0 1 1 T  X X XY 1  T      0 0 Y   1 T
0 0 A 1 0  X X AY 1  0      0 0 AY 1 0
```

STEP 3:

```
0 0 0 0 0  X X X  X  X      0 0 0  0 0
0 0 1 0 0  X X XY XY 0Y      0 0 Y   Y Y
0 0 1 1 T  X X XY 1  T      0 0 Y   1 T
0 0 1 1 0  X X XY 1  0      0 0 Y   1 0
0 0 A 1 0  X X AY 1  0      0 0 AY 1 0
```

STEP 4:

```
0 0 0 0 0  X X X  X  X      0 0 0  0 0
0 0 1 0 T  X X XY 0Y T      0 0 Y   Y T
0 0 1 1 0  X X XY 1  0      0 0 Y   1 0
0 0 1 1 0  X X XY 1  0      0 0 Y   1 0
0 0 A 1 0  X X AY 1  0      0 0 AY 1 0
```

STEP 5:

0	0	0	0	0	X	XY	XY	XY	X	0	Y	Y	Y	0
0	0	1	T	0	X	XY	1	T	0	0	Y	1	T	0
0	0	1	1	0	X	XY	XY	1	0	0	Y	Y	1	0
0	0	1	1	0	X	X	XY	1	0	0	0	Y	1	0
0	0	A	1	0	X	X	AY	1	0	0	0	AY	1	0

STEP 6:

0	0	0	T	0	X	XY	0Y	T	0	0	Y	Y	T	0
0	0	1	0	0	X	XY	1	0	0	0	Y	1	0	0
0	0	1	1	0	X	XY	XY	1	0	0	Y	Y	1	0
0	0	1	1	0	X	X	XY	1	0	0	0	Y	1	0
0	0	A	1	0	X	X	AY	1	0	0	0	AY	1	0

STEP 7:

0	0	T	0	0	X	0Y	T	0	0	0	Y	T	0	0
0	0	1	0	0	X	XY	1	0	0	0	Y	1	0	0
0	0	1	1	0	X	XY	XY	1	0	0	Y	Y	1	0
0	0	1	1	0	X	X	XY	1	0	0	0	Y	1	0
0	0	A	1	0	X	X	AY	1	0	0	0	AY	1	0

STEP 8:

0	T	0	0	0	0	T	0	0	0	0	T	0	0	0
0	0	1	0	0	X	0Y	1	0	0	0	Y	1	0	0
0	0	1	1	0	X	XY	XY	1	0	0	Y	Y	1	0
0	0	1	1	0	X	X	XY	1	0	0	0	Y	1	0
0	0	A	1	0	X	X	AY	1	0	0	0	AY	1	0

STEP 9:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	T	1	0	0	0	T	1	0	0	0	T	1	0	0
0	0	1	1	0	X	0Y	XY	1	0	0	Y	Y	1	0
0	0	1	1	0	X	X	XY	1	0	0	0	Y	1	0
0	0	A	1	0	X	X	AY	1	0	0	0	AY	1	0

STEP 10:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	0	0	0	0	1	0	0
0	T	1	1	0	0	T	1	1	0	0	T	1	1	0
0	0	1	1	0	X	0Y	XY	1	0	0	Y	Y	1	0
0	0	A	1	0	X	X	AY	1	0	0	0	AY	1	0

STEP 11:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0
0	T	1	1	0	0	T	1	1	0	0	T	1	1	0	0
0	0	A	1	0	X	0	Y	A	Y	1	0	0	0	A	Y

STEP 12:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0
0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0
0	T	A	1	0	0	T	A	Y	1	0	0	T	A	Y	1

STEP 13:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0
0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0
0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0
0	0	T	1	0	0	0	T	1	0	0	0	T	1	0	0